SHARP SERVICE MANUAL

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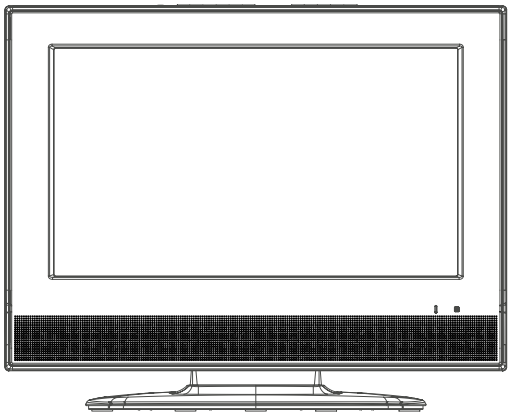

LCD COLOR TELEVISION/ DVD VIDEO PLAYER

MODEL LC-20DV20U

In the interests of user-safety (Required by safety regulations in some countries) the set should be restored to its original condition and only parts identical to those specified should be used.

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SHARP CORPORATION

This document has been published to be used for after sales service only.
The contents are subject to change without notice.

CAUTION

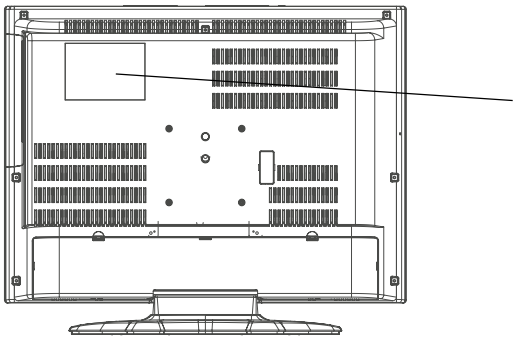
THIS LCD COLOR TELEVISION EMPLOYS A LASER SYSTEM.

TO ENSURE PROPER USE OF THIS PRODUCT, PLEASE READ THIS SERVICE MANUAL CAREFULLY AND RETAIN FOR FUTURE REFERENCE. SHOULD THE UNIT REQUIRE MAINTENANCE, CONTACT AN AUTHORIZED SERVICE LOCATION-SEE SERVICE PROCEDURE.

USE OF CONTROLS, ADJUSTMENTS OR THE PERFORMANCE OF PROCEDURES OTHER THAN THOSE SPECIFIED HEREIN MAY RESULT IN HAZARDOUS RADIATION EXPOSURE.

TO PREVENT DIRECT EXPOSURE TO LASER BEAM, DO NOT TRY TO OPEN THE ENCLOSURE. VISIBLE LASER RADIATION MAY BE PRESENT WHEN THE ENCLOSURE IS OPENED. DO NOT STARE INTO BEAM.

Location of the required Marking
The rating sheet and the safety caution are on the rear of the unit.



CERTIFICATION: COMPLIES WITH FDA RADIATION PERFORMANCE STANDARDS, 21 CFR SUBCHAPTER J.

PREPARATION OF SERVICING

The laser diode used for a pickup head may be destroyed with external static electricity.
Moreover, even if it is operating normally after repair, when static electricity discharge is received at the time of repair, the life of the product may be shortened.
Please perform the following measure against static electricity, be careful of destruction of a laser diode at the time of repair.

- Place the unit on a workstation equipped to protect against static electricity, such as conductive mat.
- Soldering iron with ground wire or ceramic type is used.
- A worker needs to use a ground conductive wrist strap for body.

IMPORTANT SERVICE SAFETY INFORMATION

Safety precautions to be followed during servicing:

1. Parts marked with an ⚠ are critical parts for safety. Replace only with the one described in the parts list.
2. Before returning the DVD product to the customer, make the appropriate leakage current check or resistance measurements to ensure that exposed parts are properly insulated from the supply circuit.

A leakage current check is recommended for this unit. Plug the AC line cord directly into a 120V 60Hz AC outlet (do not use an isolation transformer for this check). Use a leakage current tester (Fig. 1) or a metering system which complies with Underwriters Laboratories (UL 1492P). Measure for current from all exposed metal parts of the cabinet to a known earth ground: particularly, any exposed metal part having a return path to the chassis. Any current measured must not exceed 0.5mA. Any measurement not within the limits outlined above are indicative of a potential shock hazard and corrective action must be taken before returning the unit to the customer.

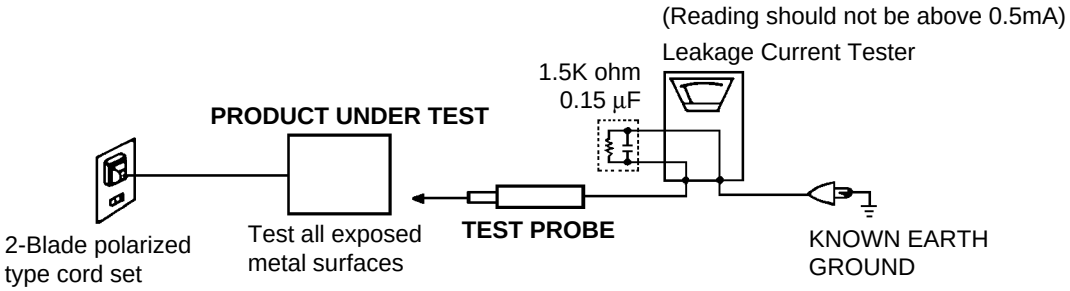


Fig. 1 AC Leakage Test

IMPORTANT SAFEGUARDS

1) Read these instructions.

2) Keep these instructions.

3) Heed all warnings.

4) Follow all instructions.

5) Do not use this apparatus near water.

6) Clean only with dry cloth.

7) Do not block any ventilation openings. Install in accordance with the manufacturer's instructions.

8) Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.

9) Do not defeat the safety purpose of the polarized or grounding-type plug. A polarized plug has two blades with one wider than the other. A grounding type plug has two blades and a third grounding prong. The wide blade or the third prong are provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.

10) Protect the power cord from being walked on or pinched particularly at plugs, convenience receptacles, and the point where they exit from the apparatus.

11) Only use attachments/accessories specified by the manufacturer.

12) Use only with the cart, stand, tripod, bracket, or table specified by the manufacturer, or sold with the apparatus. When a cart is used, use caution when moving the cart/apparatus combination to avoid injury from tip-over.

PORTABLE CART WARNING
(symbol provided by RETAC)

S3126A

13) Unplug this apparatus during lightning storms or when unused for long periods of time.

14) Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as power-supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.

15) Apparatus shall not be exposed to dripping or splashing and that no objects filled with liquids, such a vases, shall be placed on the apparatus.

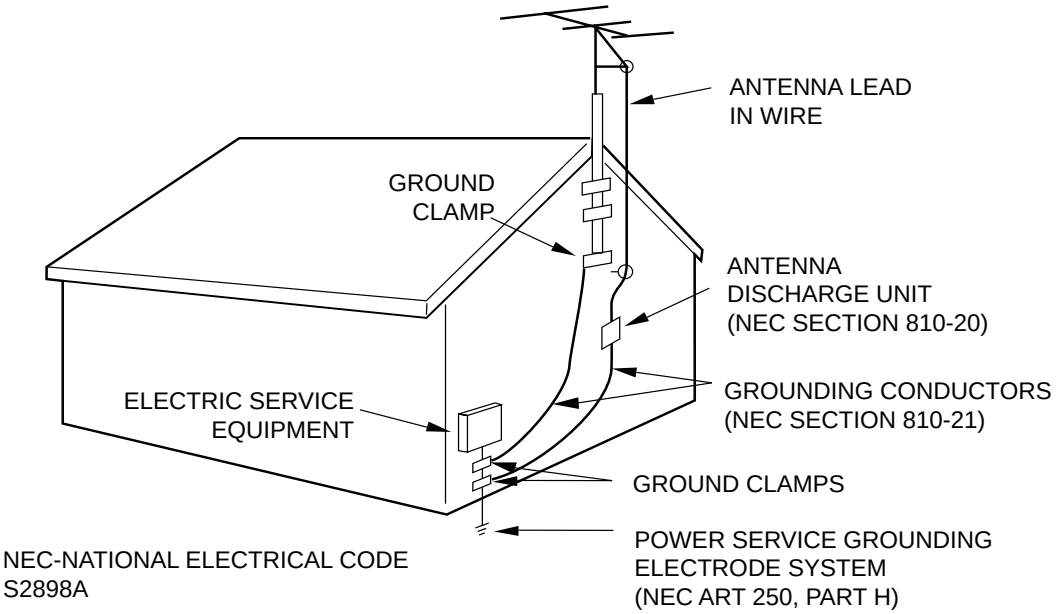
16) An outside antenna system should not be located in the vicinity of overhead power lines or other electric light or power circuits, or where it can fall into such power lines or circuits. When installing an outside antenna system, extreme care should be taken to keep from touching such power lines or circuits, as contact with them might be fatal.

17) Do not overload wall outlets and extension cords, as this can result in a risk of fire or electric shock.

18) Do not push objects through any openings in this unit, as they may touch dangerous voltage points or short out parts that could result in fire or electric shock. Never spill or spray any type of liquid into the unit.

19) If an outside antenna or cable system is connected to the unit, be sure the antenna or cable system is grounded to provide some protection against voltage surges and built-up static charges, Section 810 of the National Electrical Code, ANSI/NFPA 70, provides information with respect to proper grounding of the mast and supporting structure, grounding of the lead-in wire to an antenna discharge unit, size of grounding conductors, location of antenna discharge unit, connection to grounding electrodes, and requirements for the grounding electrode.

EXAMPLE OF ANTENNA GROUNDING AS PER THE NATIONAL ELECTRICAL CODE


ANTENNA LEAD IN WIRE
GROUND CLAMP
ANTENNA DISCHARGE UNIT (NEC SECTION 810-20)
GROUNDING CONDUCTORS (NEC SECTION 810-21)
ELECTRIC SERVICE EQUIPMENT
GROUND CLAMPS
POWER SERVICE GROUNDING ELECTRODE SYSTEM (NEC ART 250, PART H)

NEC-NATIONAL ELECTRICAL CODE
S2898A

20) When replacement parts are required, be sure the service technician uses replacement parts specified by the manufacturer or those that have the same characteristics as the original part.
Unauthorized substitutions may result in fire, electric shock or other hazards.

21) Upon completion of any service or repairs to this unit, ask the service technician to perform safety checks to determine that the unit is in proper operating condition.

22) Keep your fingers clear of the disc slot as it is closing. It may cause injury.

23) When you connect the product to other equipment, turn off the power and unplug all of the equipment from the wall outlet. Failure to do so may cause an electric shock and serious personal injury. Read the owner's manual of the other equipment carefully and follow the instructions when making any connections.

24) Reduce the volume to the minimum level before you turn on the product. Otherwise, sudden high volume sound may cause hearing or speaker damage.

25) Do not allow the product to output distorted sound for an extended period of time. It may cause speaker overheating and fire.

26) When you use the headphones, keep the volume at a moderate level. If you use the headphones continuously with high volume sound, it may cause hearing damage.

27) Do not look into the opening of the disc slot or ventilation opening of the product to see the source of the laser beam. It may cause eye damage.

28) Do not use a cracked, deformed, or repaired disc. These discs are easily broken and may cause serious personal injury and product malfunction.

29) This reminder is provided to call the cable TV system installer's attention to Article 820-40 of the NEC that provides guidelines for proper grounding and, in particular, specifies that the cable ground shall be connected to the grounding system of the building, as close to the point of cable entry as practical.

CONDENSATION

Moisture will form in the operating section of the player if the player is brought from cool surroundings into a warm room or if the temperature of the room rises suddenly. When this happens, player's performance will be impaired.
To prevent this, let the player stand in its new surroundings for about an hour before switching it on, or make sure that the room temperature rises gradually.
Condensation may also form during the summer if the player is exposed to the breeze from an air conditioner. In such cases, change the location of the player.

HOW TO HANDLE THE LCD PANEL

- Do not press hard or jolt the LCD panel. It may cause the LCD panel glass to break and injury may occur.
- If the LCD panel is broken, make absolutely sure that you do not touch the liquid in the panel. This may cause skin inflammation.
  If the liquid gets in your mouth, immediately gargle and consult with your doctor. Also, if the liquid gets in your eyes or touches your skin, consult with your doctor after rinsing for at least 15 minutes or longer in clean water.

WHEN REPLACING DVD DECK

[When removing the DVD Deck]

Before removing Pick Up PCB and DVD PCB connector, the short circuit the position shown in **Fig. 1** using a soldering iron. If you remove the DVD Deck with no soldering, the Laser may be damaged.

[When installing the DVD Deck]

Remove all the soldering on the short circuit position after the connection of Pick Up PCB and DVD PCB connector.

NOTE

- Before your operation, please read “PREPARATION OF SERVICING”.
- Use the Lead Free solder.
- Manual soldering conditions
  - Soldering temperature: 350 ± 5˚C
  - Soldering time: Within 2 seconds
  - Soldering combination: Sn-3.0Ag-0.5Cu
- When Soldering/Removing of solder, use the draw in equipment over the Pick Up Unit to keep the Flux smoke away from it.

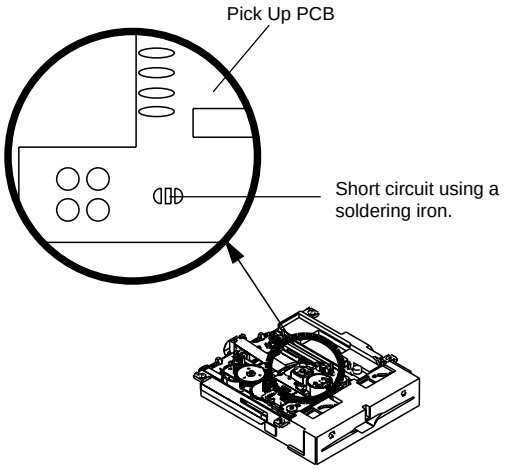


Fig. 1

DISC REMOVAL METHOD AT NO POWER SUPPLY

1. Remove the Back Cabinet and Angle Deck. **(Refer to item 1 of the DISASSEMBLY INSTRUCTIONS.)**
2. Slide the Belt Loading toward the arrow direction by hand to release the lock. **(Refer to Fig. 1)**
3. Take out the Disc from the DVD Deck. Be careful not to scratch on the Disc.

DVD Deck

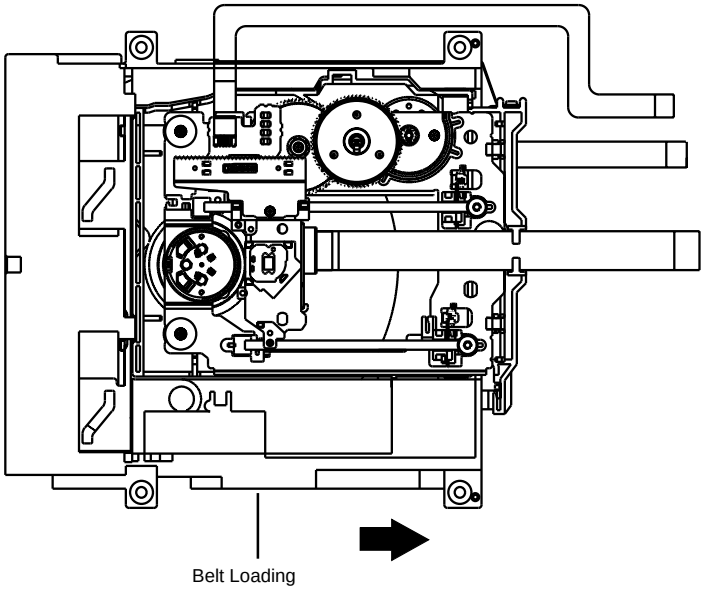


Fig. 1

PARENTAL CONTROL - RATING LEVEL

4 DIGIT PASSWORD CANCELLATION

If the stored 4 digit password in the Rating Level menu needs to be cancelled, please follow the steps below.

1. Turn Unit ON.
2. Set the DVD to the Stop Mode.
3. Check that 'No disc' is displayed on the screen.
4. Press and hold the 'STOP' button on the front panel.
5. Simultaneously press and hold the '7' key on the remote control unit.
6. Hold both keys for more than 2 seconds.
7. The On Screen Display message 'PASSWORD CLEAR' will appear.
8. The 4 digit password has now been cleared.

GENERAL SPECIFICATIONS

G-1	**TV System**	LCD	LCD Size / Visual Size		20.04 inch / 508.9mmV
			LCD Type		Color TFT LCD
			Number of Pixels		1366(H) x 768(V)
			View Range	Left/Right	88/88 degree
				Up/Down	88/88 degree
		Color System			NTSC
		Speaker			2 Speaker
			Position		Front
			Size		1.8 x 3.9 inch
			Impedance		8 ohm
		Sound Output	Max		2.5W + 2.5W
			10%(Typical)		---
G-2	**DVD System**	Color System			NTSC
		Disc			DVD, CD-DA, CD-R/RW
					DVD-R/RW (Video Format Only)
		Disc Diameter			120 mm , 80 mm
		Drive			DSM-2
		Search speed	Fwd		4 step
				Actual	2-45 times (DVD)
					4-40 times (CD)
			Rev		4 step
				Actual	2-45 times (DVD)
					4-40 times (CD)
		Slow speed	Fwd		1/7 -1/2 times
				Actual	--
			Rev		1/7 -1/2 times
				Actual	--
G-3	**Tuning System**	Broadcasting System			US System M
		Tuner and Receive CH	System		1Tuner
			Destination		US (W/CABLE)
			CH Coverage		2~69, 4A, A-5~A-1, A~I, J~W, W+1~W+84
		Intermediate Frequency	Picture(FP)		45.75MHz
			Sound(FS)		41.25MHz
			FP-FS		4.50MHz
		Preset CH			No
		Stereo/Dual TV Sound			US-Stereo
		Tuner Sound Muting			Yes
G-4	**Signal**	Video Signal	Input Level		1 V p-p/75 ohm
			Output Level		--
			S/N Ratio (Weighted)		--
			Horizontal Resolution at DVD Mode		--
					--
		RGB Signal	Output Level		--
		Audio Signal	Input Level		0.85 V p-p/50k ohm
			Output Level	at DVD	--
				at TV	--
			Digital Output Level		0.5 V p-p/75 ohm
			S/N Ratio at DVD (Weighted)		--
			Harmonic Distortion		--
			Frequency Response :	at DVD	--
				at Video CD	--
				at SVCD	--
				at CD	--
G-5	**Power**	Power Source	AC		120V, 60Hz
			DC		--
		Power Consumption		at AC	90W at 120V 60Hz
				at DC	--
			Stand by (at AC)		1W at 120V 60Hz
			Energy Star		Yes
			Per Year		-- kWh/Year
		Protector	Power Fuse		Yes
			Safety Circuit		Yes
			IC Protector(Micro Fuse)		Yes
G-6	**Regulation**		Safety		UL/CSA/NOM
			Radiation		FCC/IC
			Laser		DHHS
G-7	**Temperature**		Operation		+5oC ~ +40oC
			Storage		-20oC ~ +60oC
G-8	**Operating Humidity**				Less than 80% RH
G-9	**Clock and Timer**	Clock			Yes
		Sleep Timer	Max Time		120 Min
			Step		10 Min
		On Timer	Program		No
		Off Timer	Program		No
		Game Timer			No
		Wake Up Timer			No
		Timer Back-up (at Power Off Mode)		more than	-- Min Sec

GENERAL SPECIFICATIONS

G-10	**Remote Control**	Unit		RC-MR
		Glow in Dark Remocon		No
		Remocon Format		SHARP
		Format		TV:SHARP, DVD:KASEIKYO
		Custom Code		TV:SHARP 15bit, DVD:KASEIKYO 48bit
		Power Source	Voltage(D.C)	3V
			UM size x pcs	UM-3 x 2 pcs
		Total Keys		47 Keys
		Keys	POWER	Yes
			DISPLAY	Yes
			SLEEP	Yes
			VIEW MODE	Yes
			INPUT SELECT	Yes
			1	Yes
			2	Yes
			3	Yes
			4	Yes
			5	Yes
			6	Yes
			7	Yes
			8	Yes
			9	Yes
			0	Yes
			MUTE	Yes
			AUDIO	Yes
			VOL+	Yes
			VOL-	Yes
			CH+	Yes
			CH-	Yes
			LEFT/SLOW-	Yes
			ENTER	Yes
			RIGHT/SLOW+	Yes
			UP	Yes
			DOWN	Yes
			SETUP/TV MENU	Yes
			EXIT/CANCEL	Yes
			RETURN	Yes
			SUBTITLE	Yes
			TV/DVD	Yes
			OPEN/CLOSE(EJECT)	Yes
			FWD(SEARCH+)	Yes
			REV(SEARCH-)	Yes
			SKIP+	Yes
			SKIP-	Yes
			PAUSE/STILL	Yes
			PLAY	Yes
			STOP	Yes
			PLAY MODE	Yes
			ANGLE	Yes
			ZOOM	Yes
			DVD MENU	Yes
			TOP MENU	Yes
			REPAT A-B	Yes
			MARKER	Yes
			DIRECT SKIP(JUMP)	Yes
			FREEZE	No

GENERAL SPECIFICATIONS

G-11	**Features (TV)**	Auto Shut Off		Yes
		Auto Search		No
		Power On Memory		Yes
		Comb Filter		Yes 3 -D
		Game Position		No
		Auto Setup(Language/CH Program)		No
		Picture Setting(TV)		Yes
			AV Mode(Picture Preference)	Yes
			Brightness , Contrast , Color	Yes
			Tint	Yes
			Sharpness	Yes
			Color Temperature	Yes
			Cable Clear	No
		Picture Setting(PC)		Yes
			BRIGHTNESS , CONTRAST	Yes
			HOR POSITION , VER POSITION	Yes
			PHASE , CLOCK	Yes
			AUTO ADJUST	No
			RED , GREEN , BLUE	Yes
		Audio	MTS	Yes
			Tone Control (Bass/Treble/Balance)	Yes
			Stable Sound	No
			Surround	Yes
			BBE	No
			SRS WOW (SRS 3D/Focus/Tru Bass)	No
			Variable Audio Out	No
		Tuning	CH Program	Yes
			Air/Cable	Yes
			ADD/DELETE	Yes
		Label	CH Label	Yes
			Video Label	Yes
		Favorite CH		No
		V-Chip		Yes
			Type	USA Type
		RRT Setup		No
		Lock	Hotel Lock	No
			Channel Lock	No
			Video Lock	No
			Panel Lock	No
		OSD Language		English French Spanish
		Closed Caption		Yes
		CC Advanced		No
		View Mode (Picture Size)		Yes(SIDE BAR/S.STRETCH/ZOOM/STRETCH)
		Picture Scroll		Yes
		Cinema Mode		Yes
		Aspect		Yes
		Backlight		Yes
		PFC(Power Factor circuit)		No
		Freeze frame		No
		PIP/POP		No
		Direct Input Selection		Yes
		PC Monitor Input		Yes
			VGA (640x480)	Yes (60Hz)
			VGA (720x400)	Yes (70Hz)
			WVGA (848x480)	Yes (60Hz)
			SVGA (800x600)	Yes (60Hz)
			XGA (1024x768)	Yes (60Hz)
			WXGA (1280x768)	Yes (60Hz)
			WXGA (1280x720)	Yes (60Hz)
			WXGA (1360x768)	Yes (60Hz)
			SXGA (1280x1024)	No
		HDMI Input		Yes
			VGA (640x480)	Yes (60Hz)
			720x480i (4:3)	Yes (60Hz)
			720x480i (16:9)	Yes (60Hz)
			720x480p (4:3)	Yes (60Hz)
			720x480p (16:9)	Yes (60Hz)
			720x576i (4:3)	No
			720x576i (16:9)	No
			720x576p (4:3)	No
			720x576p (16:9)	No
			1280x720p	Yes (60Hz)
			1920x1080i	Yes (60Hz)

GENERAL SPECIFICATIONS

		Component Input		Yes
			720x480i (4:3)	Yes (60Hz)
			720x480i (16:9)	Yes (60Hz)
			720x480p (4:3)	Yes (60Hz)
			720x480p (16:9)	Yes (60Hz)
			720x576i (4:3)	No
			720x576i (16:9)	No
			720x576p (4:3)	No
			720x576p (16:9)	No
			1280x720p	Yes (60Hz)
			1920x1080i	Yes (60Hz)
	Features (DVD)	Tray Lock		No
		Video CD Playback		No
		SVCD Playback		No
			Overlay Graphics And Text	No
			Command List	No
			Entry Point Jump	No
		MP3 Playback		Yes
		Divx Playback		No
			DMF Support	No
		JPEG		Yes
		WMA		Yes
		Digital Out	(Dolby Digital)	Yes
			(MPEG)	Yes
			(PCM)	Yes
			(DTS)	Yes
		Down Mix Out	(Dolby Digital)	Yes
			(DTS)	No
		Closed Caption		Yes
		Screen Saver		No
		Audio DAC		192kHz / 24bit
G-12	**Accessories**	Owner's Manual	Language	English/French/Spanish
			w/Guarantee Card	Yes
		Remote Control Unit		Yes
		Rod Antenna		No
			Poles	--
			Terminal	--
		Loop Antenna		No
			Terminal	--
		U/V Mixer		No
		DC Car Cord (Center+)		No
		Guarantee Card		No
		Warning Sheet		No
		Circuit Diagram		No
		Antenna Change Plug		No
		Service Facility List		No
		Important Safeguard		No
		Dew/AHC Caution Sheet		No
		Quick Set-up Sheet		No
		Battery		Yes
			UM size x pcs	UM-3 x 2 pcs
			OEM Brand	No
		AC Adapter		No
		AC Cord (for AC Adapter)		No
		AV Cord (2Pin-1Pin)		No
		Registration Card (NDL Card)		Yes
		300ohm to 75ohm Antenna Adapter		No
		Sheet Information (Return)		No
		Sheet Information (HDMI)		No
		Screw for wall hanging		No

GENERAL SPECIFICATIONS

G-13	**Interface**	Switch	Top	Power (Tact)	Yes
				Channel Up/Menu Up	Yes
				Channel Down/Menu Down	Yes
				Volume Up/Menu >	Yes
				Volume Down/Menu <	Yes
				Menu	Yes
				Play	Yes
				Eject	Yes
				Skip+, Search+	Yes
				Skip-, Search-	Yes
				Still/Pause	No
				Stop	Yes
				Main Power SW	No
				Input Select	Yes
		Indicator		Power / Stand-by	Yes(GREEN / RED)
				Power	No
				Stand-by	No
				On Timer	No
		Terminals	Rear	Video Input 1	RCA x 1
				Audio Input 1	RCA x 2(L/MONO, R)
				S - Input 1	Yes
				Video Input 2	RCA x 1
				Audio Input 2	RCA x 2(L/MONO, R)
				S- Input 2	No
				Video Output	No
				Audio Output	No
				Component Input	RCA x 3
				Analog Audio	RCA x 2(L/MONO, R)
				HDMI Input	HDMI x 1
				Analog Audio	PC Monitor Audio Input Alternative
				PC Monitor Input	Dsub15pin x 1
				Analog Audio	RCA x 2(L/MONO, R)
				Digital Audio Output	Coaxial (DVD Only)
				DC Jack	No
				VHF/UHF Antenna Input	F Type
				Other Terminal	Headphone
				AC Outlet	No
			Side	Video Input 2	No
				Audio Input 2	No
				PC Monitor Input(w/ Analog Audio L/R)	No
				Other Terminal	No
G-14	**Set Size**			Approx. W x D x H (mm)	553 x 228 x 448
				w/o Handle, Stand Approx. W x D x H (mm)	553 x 110 x 403
G-15	**Weight**			Net (Approx.)	9.2kg (20.3 lbs)
				Net w/o Handle, Stand (Approx.)	7.9kg (17.5 lbs)
				Gross (Approx.)	11.5kg (25.4 lbs)
G-16	**Carton**		Master Carton		No
				Content	--- Sets
				Material	--- / ---
				Dimensions W x D x H(mm)	---
				Description of Origin	---
			Gift Box	Material	Double/White
				W/Color Photo Label	No
				W/Handle	No
				Dimensions W x D x H(mm)	654 x 338 x 565
				Description of Origin	Yes
			Drop Test		1 Corner / 3 Edges / 6 Surfaces
				Height (cm)	62
			Container Stuffing (40' container)		492 Sets
G-17	**Material**		Cabinet	Front	PS 94V0 NON-DECABROM
				Rear	PS 94V0 NON-DECABROM
			PCB	Non-Halogen Demand	No
				Eyelet Demand	Yes
G-18	**Environment**		Environmental standard requirement (by buyer)		Green PROCUREMENT of SHARP
			Pb-Free		Phase 3 (Phase 3A)
				Measures for Whisker	Yes

DISASSEMBLY INSTRUCTIONS

1. REMOVAL OF MECHANICAL PARTS AND P.C. BOARDS

1-1: BACK CABINET (Refer to Fig. 1-1)

1. Remove the 19 screws ①.
2. Remove the Back Cabinet in the direction of arrow.

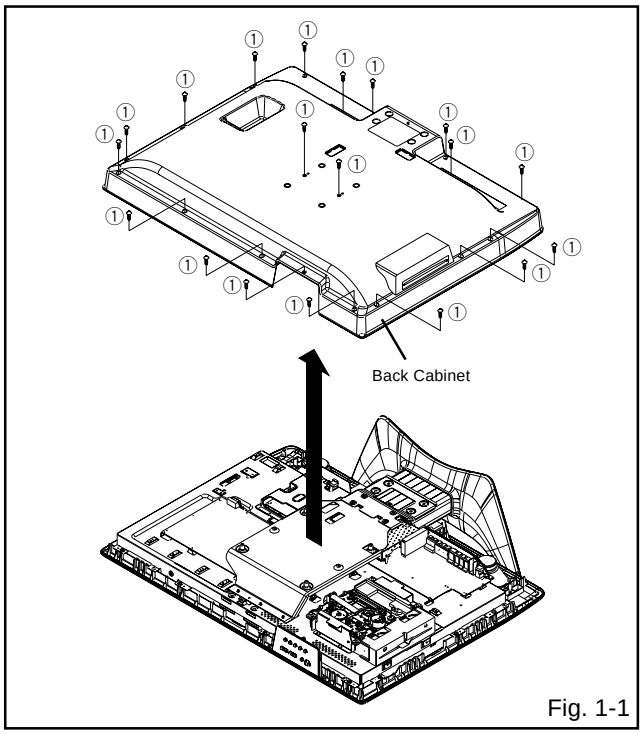


Fig. 1-1

1-2: STAND ASS'Y/ANGLE BACK 1/2/PLATE JACK 1/2 (Refer to Fig. 1-2)

1. Remove the 4 screws ①.
2. Remove the Stand Ass'y in the direction of arrow (A).
3. Remove the 4 screws ②.
4. Remove the 6 screws ③.
5. Remove the Angle Back 1/2 in the direction of arrow (B).
6. Remove the 4 screws ④.
7. Remove the Plate Jack 2 in the direction of arrow (C).
8. Remove the 11 screws ⑤.
9. Remove the Plate Jack 1 and Shield Jack in the direction of arrow (D).

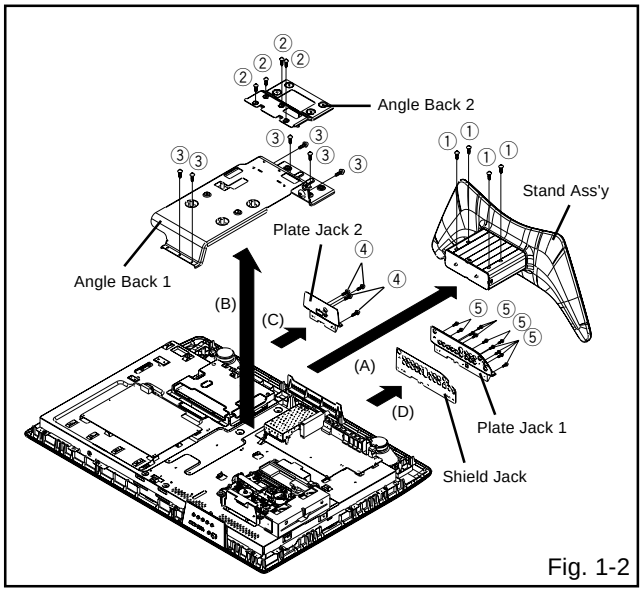


Fig. 1-2

1-3: PCB ASS'Y (Refer to Fig. 1-3)

1. Disconnect the following connectors: (CP506, CP507, CP508, CP510, CP511, CP512).
2. Remove the 9 screws ①.
3. Remove the Holder AC-Inlet and Power PCB in the direction of arrow (A).
4. Disconnect the following connectors: (CP802, CP803, CP2200, CP3201, CP3602, CP7203).
5. Remove the 10 screws ②.
6. Remove the Shield Scaler and Scaler PCB in the direction of arrow (B).
7. Disconnect the following connectors: (CP301, CP303, CP2403, CP2404, CP4202).
8. Remove the 6 screws ③.
9. Remove the DigitalPCB and AV PCB in the direction of arrow (C).
10. Remove the 2 screws ④.
11. Remove the Remocon PCB in the direction of arrow (D).
12. Remove the 8 screws ⑤.
13. Remove the Plate Button, Operation PCB and Operation 2 PCB in the direction of arrow (E).

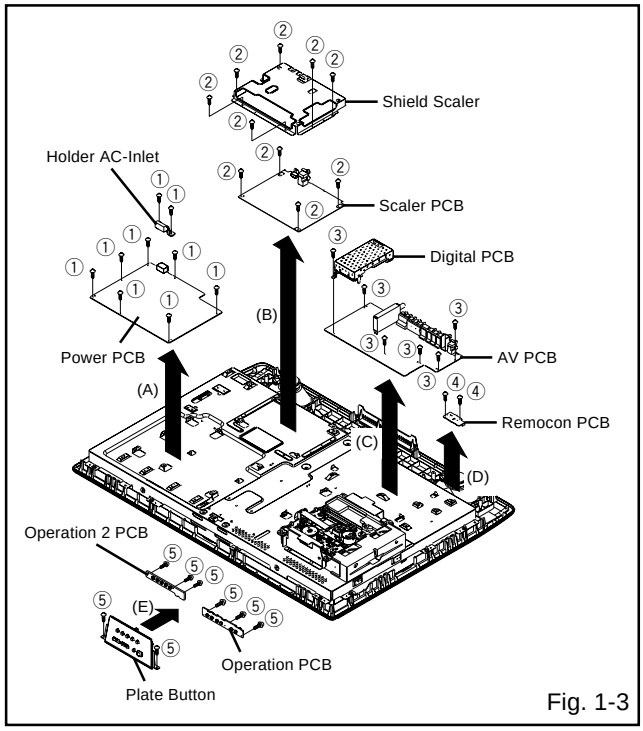


Fig. 1-3

DISASSEMBLY INSTRUCTIONS

1-4: DVD MT PCB/DVD DECK (Refer to Fig. 1-4)

1. Short circuit the position shown in **Fig. 1-4** using a soldering iron. If you remove the DVD Deck with no soldering, the Laser may be damaged.
2. Disconnect the following connectors: **(CP2301, CP2302 and CP2303)**.
3. Remove the 4 screws ①.
4. Remove the Shield MPEG, Shield FCC and DVD MT PCB in the direction of arrow (A).
5. Remove the 4 screws ②.
6. Remove the DVD Deck in the direction of arrow (A).
7. Remove the 2 screws ③.
8. Remove the Angle Deck-R in the direction of arrow (B).
9. Remove the 2 screws ④.
10. Remove the Angle Deck-L in the direction of arrow (C).

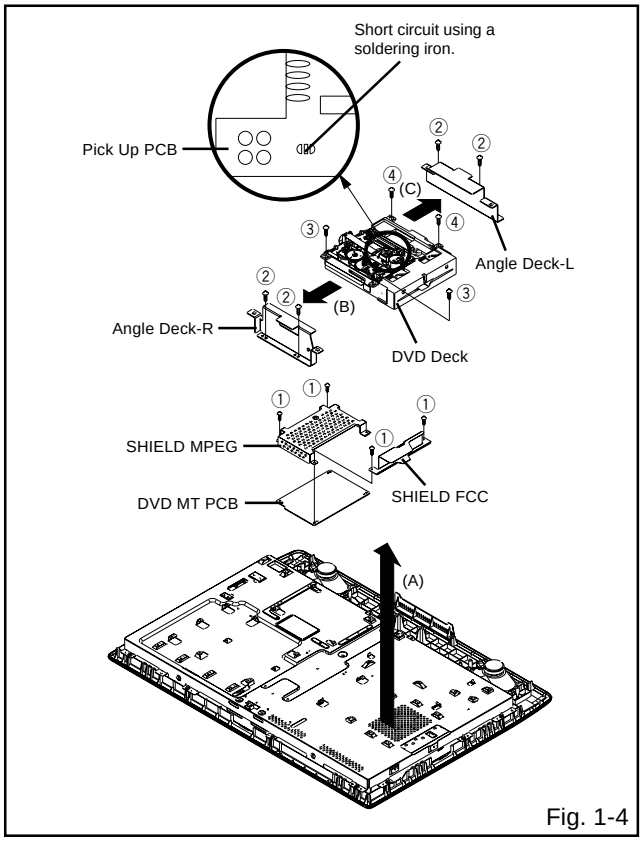


Fig. 1-4

NOTE

1. Before your operation, please read “PREPARATION OF SERVICING”.
2. Use the Lead Free solder.
3. Manual soldering conditions
   - Soldering temperature: 350 ± 5˚C
   - Soldering time: Within 2 seconds
   - Soldering combination: Sn-3.0Ag-0.5Cu
4. When Soldering/Removing of solder, use the drawing equipment over the Pick Up Unit to keep the Flux smoke away from it.
5. When installing the DVD Deck, remove all the soldering on the short circuit position after the connection of Pick Up PCB and DVD PCB connector.

1-5: LCD COVER/LCD PANEL (Refer to Fig. 1-5)

1. Remove the 8 screws ①.
2. Remove the LCD Cover in the direction of arrow (A).
3. Remove the 4 screws ②.
4. Remove the LCD Panel in the direction of arrow (B).

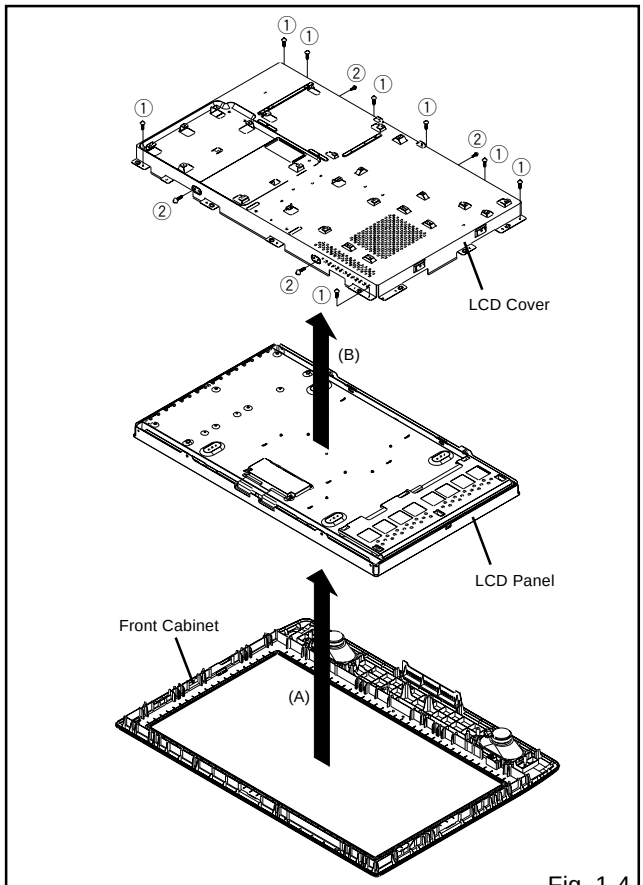


Fig. 1-4

DISASSEMBLY INSTRUCTIONS

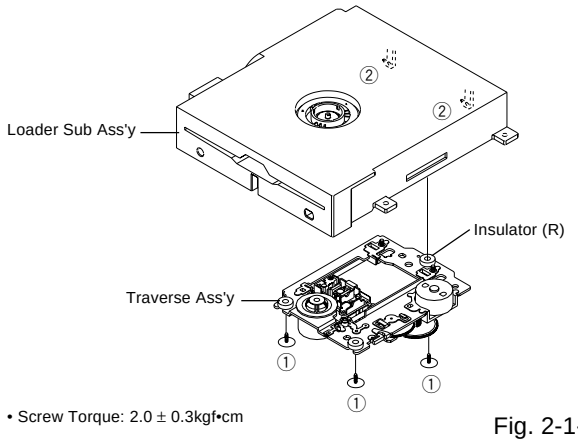
2. REMOVAL OF DVD DECK PARTS

NOTE

1. Disassemble only the DVD DECK PARTS parts listed here. Minute adjustments are needed if the disassembly is done. If the repair is needed except listed parts, replace the DVD MECHA ASS'Y.

2-1: TRAVERSE ASS'Y (Refer to Fig. 2-1-A)

1. Remove the 3 screws ①.
2. Unlock the 2 supports ②.
3. Remove the Insulator (R) from the Loader Sub Ass'y.
4. Remove the Traverse Ass'y.



• Screw Torque: 2.0 ± 0.3kgf•cm

Fig. 2-1-A

NOTE

1. In case of the Traverse Ass'y installation, hook the wire on the Loader Ass'y as shown Fig. 2-2-B to Fig. 2-2-D.

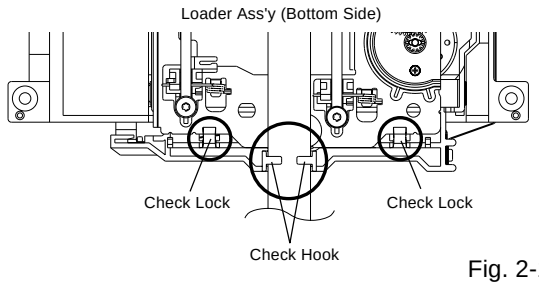


Fig. 2-1-B

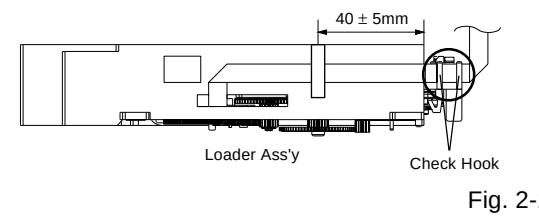


Fig. 2-1-C

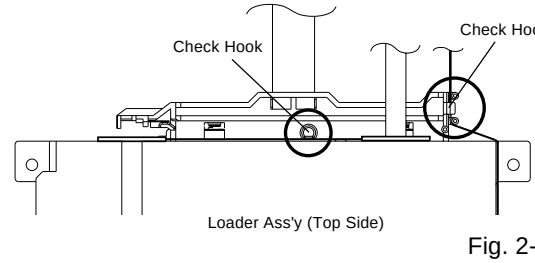
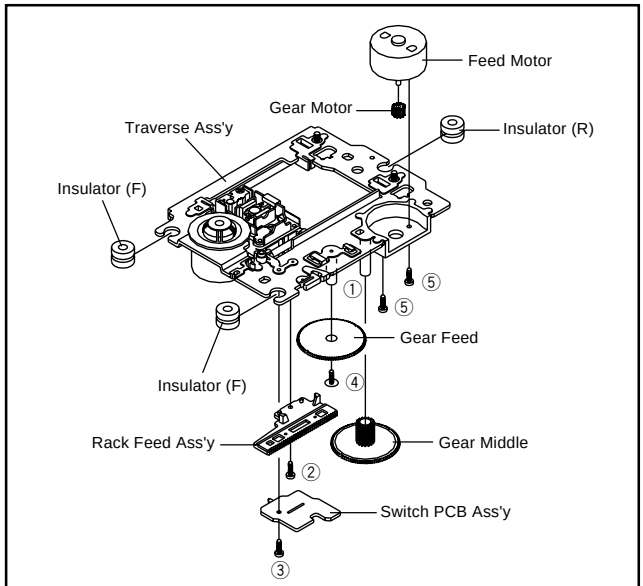


Fig. 2-1-D

2-2: SWITCH PCB ASS'Y/GEAR MIDDLE/GEAR FEED/RACK FEED ASS'Y/FEED MOTOR (Refer to Fig. 2-2-A)

1. Remove the Insulator (F).
2. Remove the Insulator (R).
3. Unlock the support ①.
4. Remove the Gear Middle.
5. Remove the screw ②.
6. Remove the Rack Feed Ass'y.
7. Remove the screw ③.
8. Remove the Switch PCB Ass'y.
9. Remove the screw ④.
10. Remove the Gear Feed.
11. Remove the 2 screws ⑤.
12. Remove the Feed Motor.
13. Remove the Gear Motor.



• Screw Torque: 1.3 ± 0.3kgf•cm (Screw ②)
• Screw Torque: 3.0 ± 0.3kgf•cm (Screw ③)
• Screw Torque: 1.0 ± 0.3kgf•cm (Screw ④, ⑤)

Fig. 2-2-A

NOTE

1. When installing the Rack Feed Ass'y, push both ends to align the teeth as shown Fig. 2-2-B. Then install it.
2. In case of the Gear Motor installation, check if the value of the Fig. 2-2-C is correct.
3. When installing the wire of the Switch PCB Ass'y, install it correctly as Fig. 2-2-D.
   Manual soldering conditions
   • Soldering temperature: 350 ± 5˚C
   • Soldering time: Within 4 seconds
   • Soldering combination: Sn-3.0Ag-0.5Cu
4. After the assembly of the Traverse Ass'y, hook the wire on the Traverse Ass'y as shown Fig. 2-2-E.

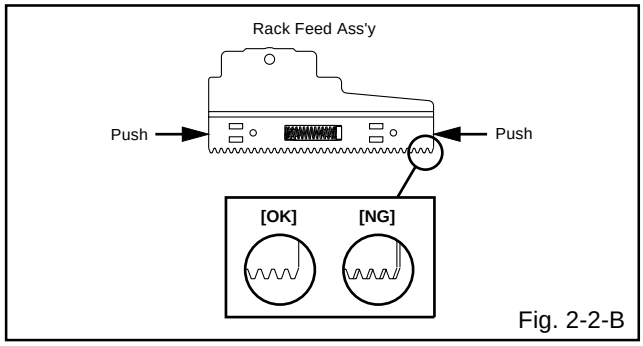


Fig. 2-2-B

DISASSEMBLY INSTRUCTIONS

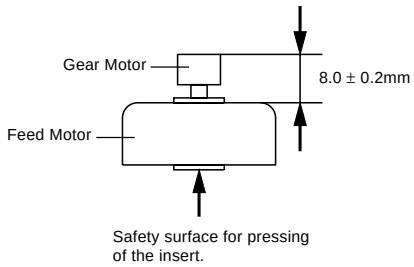


Fig. 2-2-C

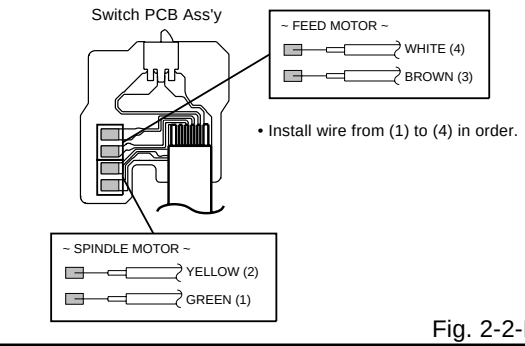


Fig. 2-2-D

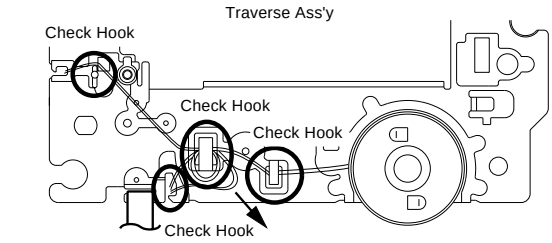


Fig. 2-2-E

2-3: FFC WIRE HANDLING

1. When installing the FFC, fold it correctly and install it as shown from Fig. 2-3-A to Fig. 2-3-B.

NOTE

1. Do not make the folding lines except the specified positions for the FFC.

[24 pin FFC]

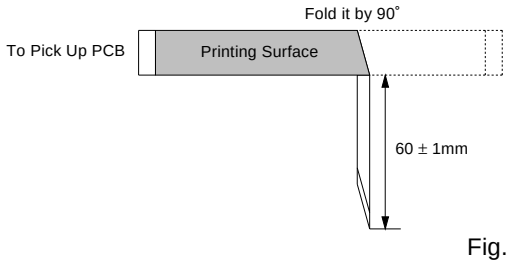


Fig. 2-3-A

[6 pin FFC]

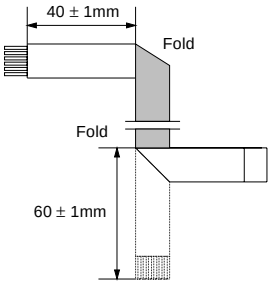


Fig. 2-3-B

DISASSEMBLY INSTRUCTIONS

3. REMOVAL AND INSTALLATION OF FLAT PACKAGE IC

REMOVAL

1. Put Masking Tape (cotton tape) around the Flat Package IC to protect other parts from any damage. **(Refer to Fig. 3-1.)**

   NOTE

   Masking is carried out on all the parts located within 10 mm distance from IC leads.

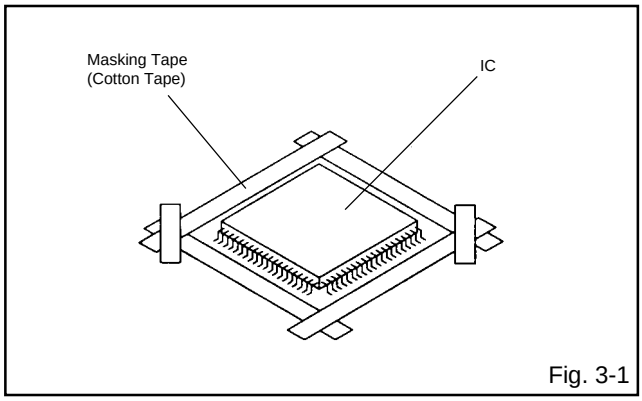


Fig. 3-1

2. Heat the IC leads using a blower type IC desoldering machine. **(Refer to Fig. 3-2.)**

   NOTE

   Do not rotate or move the IC back and forth , until IC can move back and forth easily after desoldering the leads completely.

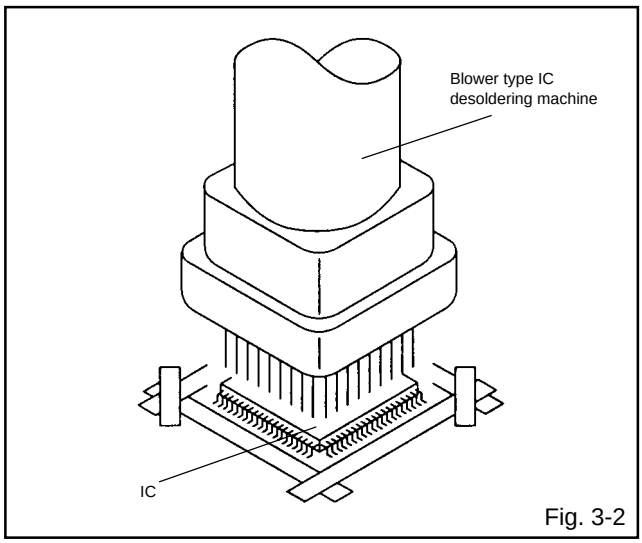


Fig. 3-2

3. When IC starts moving back and forth easily after desoldering completely, pickup the corner of the IC using tweezers and remove the IC by moving with the IC desoldering machine. **(Refer to Fig. 3-3.)**

   NOTE

   Some ICs on the PCB are affixed with glue, so be careful not to break or damage the foil of each IC leads or solder lands under the IC when removing it.

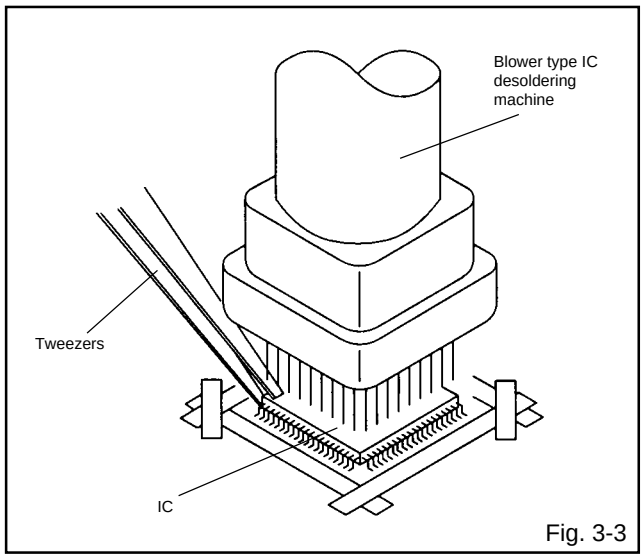


Fig. 3-3

4. Peel off the Masking Tape.

5. Absorb the solder left on the pattern using the Braided Shield Wire. **(Refer to Fig. 3-4.)**

   NOTE

   Do not move the Braided Shield Wire in the vertical direction towards the IC pattern.

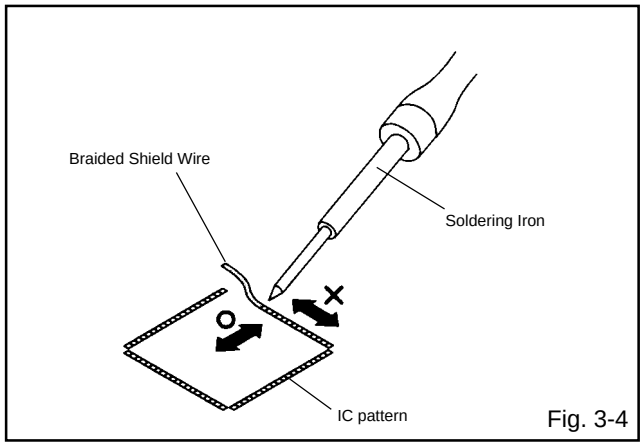


Fig. 3-4

DISASSEMBLY INSTRUCTIONS

INSTALLATION

1. Take care of the polarity of new IC and then install the new IC fitting on the printed circuit pattern. Then solder each lead on the diagonal positions of IC temporarily. **(Refer to Fig. 3-5.)**

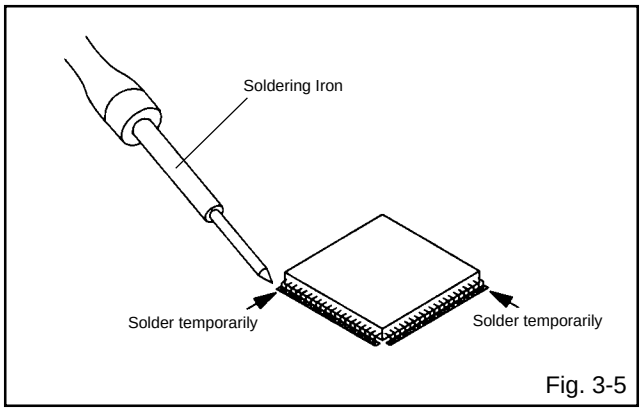


Fig. 3-5

2. Supply the solder from the upper position of IC leads sliding to the lower position of the IC leads. **(Refer to Fig. 3-6.)**

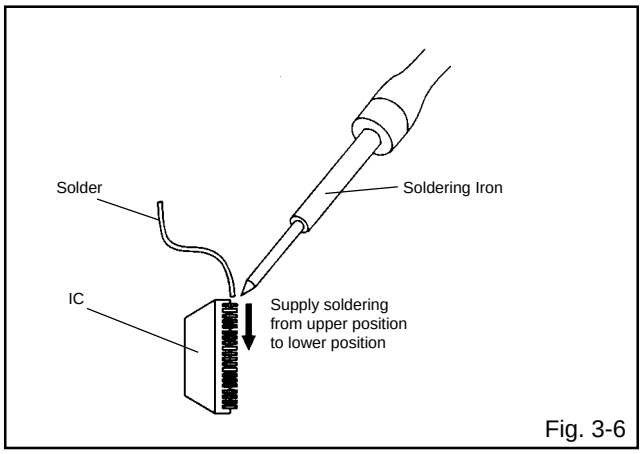


Fig. 3-6

3. Absorb the solder left on the lead using the Braided Shield Wire. **(Refer to Fig. 3-7.)**

   NOTE

   Do not absorb the solder to excess.

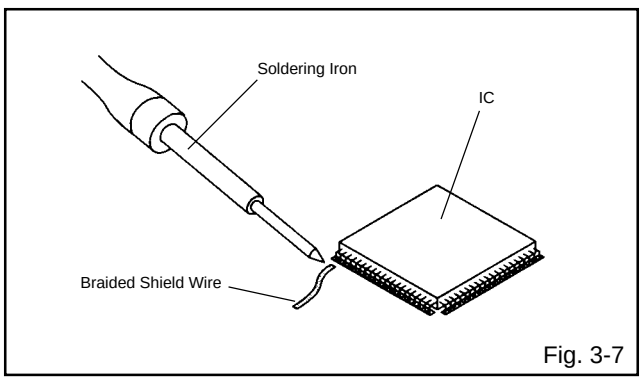


Fig. 3-7

4. When bridge-soldering between terminals and/or the soldering amount are not enough, resolder using a Thin-tip Soldering Iron. **(Refer to Fig. 3-8.)**

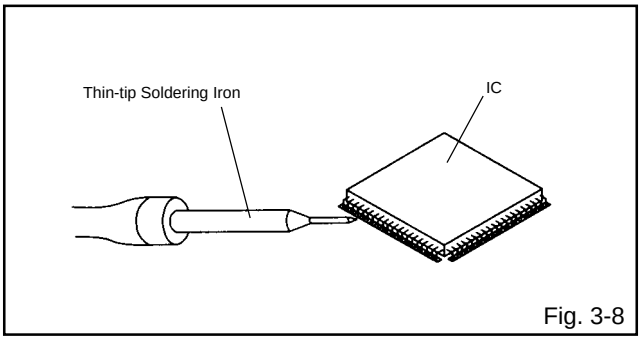


Fig. 3-8

5. Finally, confirm the soldering status on four sides of the IC using a magnifying glass.
   Confirm that no abnormality is found on the soldering position and installation position of the parts around the IC. If some abnormality is found, correct by resoldering.

   NOTE

   When the IC leads are bent during soldering and/or repairing, do not repair the bending of leads. If the bending of leads are repaired, the pattern may be damaged. So, always be sure to replace the IC in this case.

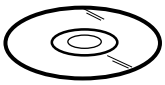
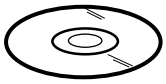
SERVICE MODE LIST

This unit is provided with the following SERVICE MODES so you can repair, examine and adjust easily.

To enter to the SERVICE MODE function, press and hold both buttons simultaneously on the main unit and on the remote control for more than the standard time in the appropriate condition. (See below chart.)

Set Condition	Set Key	Remocon Key	Standard Time	Operations
TV mode	VOL. DOWN (Minimum)	0	2 sec.	Releasing of V-CHIP PASSWORD.
TV mode	VOL. DOWN (Minimum)	1	2 sec.	Initialization of factory TV data. NOTE: If you set factory initialization, the memories are reset such as the channel setting, and the POWER ON total hours.
DVD mode (No disc)	VOL. DOWN (Minimum)	4	2 sec.	Initialization of factory DVD data. NOTE: Do not use this for normal servicing.
DVD mode (No disc)	VOL. DOWN (Minimum)	5	2 sec.	DVD Write mode. Refer to the “RE-WRITE FOR DVD FIRMWARE”.
TV mode	VOL. DOWN (Minimum)	6	2 sec.	POWER ON total hours are displayed on the screen. Can be checked of the INITIAL DATA of MEMORY IC. Refer to the "WHEN REPLACING EEPROM (MEMORY) IC".
TV mode	VOL. DOWN (Minimum)	8	2 sec.	Check of the SUM DATA, POWER ON total hours, MICON VERSION and DIGITAL TV MICON FIRMWARE on the screen. Refer to the "WHEN REPLACING EEPROM (MEMORY) IC".
ALL mode	VOL. DOWN (Minimum)	9	2 sec.	Display of the Adjustment MENU on the screen. Refer to the "ELECTRICAL ADJUSTMENT" (On-Screen Display Adjustment).
DVD mode (No disc)	STOP	1	2 sec.	Refer to the “RE-WRITE FOR DVD FIRMWARE”.
DVD mode (No disc)	STOP	7	2 sec.	Releasing of PARENTAL LOCK. Refer to the “PARENTAL CONTROL - RATING LEVEL”.

SERVICING FIXTURES AND TOOLS

JG176 Up-Date Disc	JG176 USA HD DTV ROM DISC
	

Ref. No.	Part No.	Parts Name	Remarks
JG176	APJG176104	Up-Date Disc	Up-Date of the DVD Firmware
JG176	APJG176096	USA HD DTV ROM DISC	Up-Date of the DIGITAL Firmware

RE-WRITE FOR DVD FIRMWARE

1. Turn on the power, and set the DVD mode.

2. Press both VOL. DOWN button on the set and Channel button **(5)** on the remote control for more than 2 seconds.

3. Press VOL. UP/DOWN button on the unit to check if all the keys on the unit do not function.
   NOTE: To check if DVD Write mode is set.
   When inserting Up-Date Disc at Non DVD Write mode, the read error will happen.

4. Insert the Up-Date Disc. **(Refer to SERVICING FIXTURE AND TOOLS)**

5. Automatic read will start and "Erase and Program Do Not Power Off" will be displayed on the screen.
   At this time, the horizontal noise lines may appear. But no problem.
   NOTE: Do not turn off the unit on the way or operate the keys on the unit and remocon.
   Up-Date error will happen and can not be done with the Up-Date of Up-Date Disc.

6. After the Up-Date, Logo screen will appear.

7. Unplug the AC cord, then plug it in.

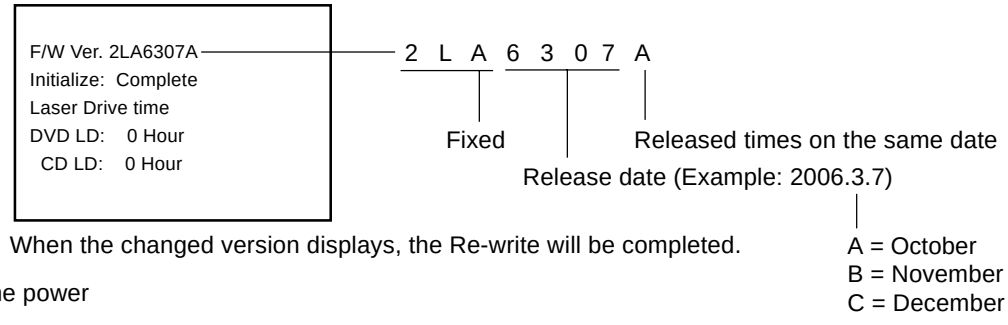
After the write, set to the initializing of shipping.

8. Turn on the power, and set the DVD mode.
9. Press both VOL. DOWN button on the set and Channel button **(4)** on the remote control for more than 2 seconds.
   The "INITIALIZE 5 ---> COMPLETE" will appear on the screen.

10. Then unplug the AC cord, and plug it in.

CHECK FOR THE FIRMWARE VERSION

11. Turn on the power, and set the DVD mode.
12. Press both Channel button **(1)** on the remote control and the STOP button on the set for more than 2 seconds.
    Firmware version will be displayed on the top left of the screen.



When the changed version displays, the Re-write will be completed.

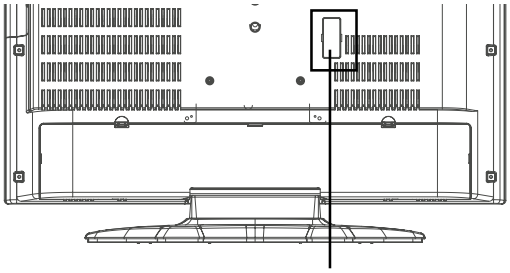
13. Turn off the power

RE-WRITE FOR DIGITAL SOFT FIRMWARE

Prepare the following tools for Up-Date of the Firmware.

1 Computer of WINDOWS2000
2 USB Flash Memory **(Use only SanDisk Cruzer Mini USB Flash Drive 256Mb)**

SET (REAR)



NOTE: The operating manual for Re-writing is included in USA HD DTV ROM DISC (JG176).

WHEN REPLACING EEPROM (MEMORY) IC

CONFIRMATION OF CHECK SUM, POWER ON TOTAL HOURS, MICON VERSION AND DIGITAL TV MICON FIRMWARE

Initial total of MEMORY IC, POWER ON total hours, MICON VERSION and Digital TV MICON Firmware can be checked on the screen. Total hours are displayed in 16 system of notation.

NOTE: If you set a factory initialization, the total hours is reset to "0".
Please refer to "CONFIRMATION OF INITIAL DATA" when SUM DATA is not corresponding.

1. Turn on the POWER, and set to the TV mode.
2. Set the VOLUME to minimum.
3. Press both VOL. DOWN button on the set and Channel button **(8)** on the remote control for more than 2 seconds.
4. After the confirmation of each check sum, POWER ON total hours, MICON VERSION and Digital TV MICON Firmware, turn off the power.

   *1 DVP1 is different according to each set.

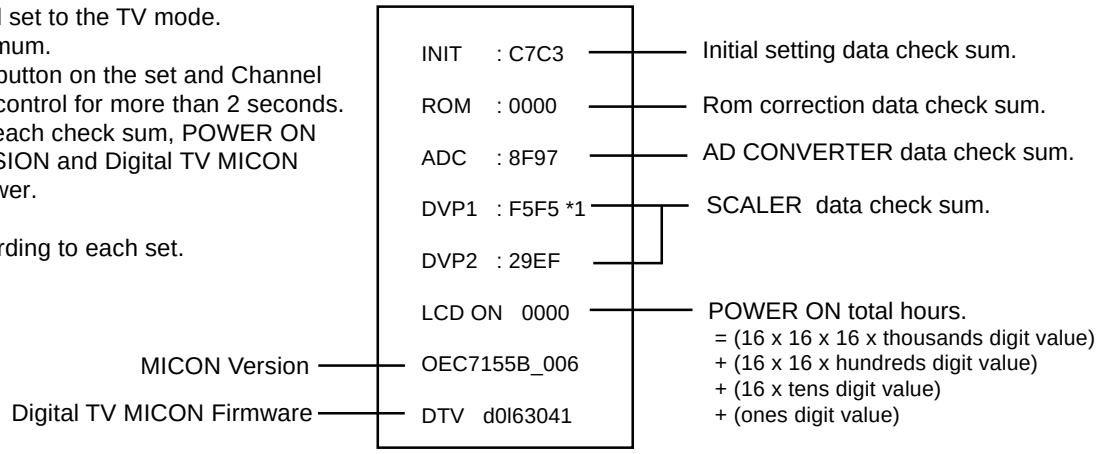

INIT : C7C3
Initial setting data check sum.
ROM : 0000
Rom correction data check sum.
ADC : 8F97
AD CONVERTER data check sum.
DVP1 : F5F5 *1
SCALER data check sum.
DVP2 : 29EF
LCD ON 0000
POWER ON total hours.
= (16 x 16 x 16 x thousands digit value)
+ (16 x 16 x hundreds digit value)
+ (16 x tens digit value)
+ (ones digit value)
MICON Version
OEC7155B_006
Digital TV MICON Firmware
DTV d0l63041

FIG. 1

CONFIRMATION OF INITIAL DATA

If a service repair is undertaken where it has been required to change the MEMORY IC, the following steps should be taken to ensure correct data settings while making reference to INITIAL SETTING TABLE (Attached "INITIAL DATA").

1. Turn on the POWER, and set to the TV mode.
2. Set the VOLUME to minimum.
3. Press both VOL. DOWN button on the set and Channel button **(6)** on the remote control for more than 2 seconds. ADDRESS and DATA should appear as FIG 2.

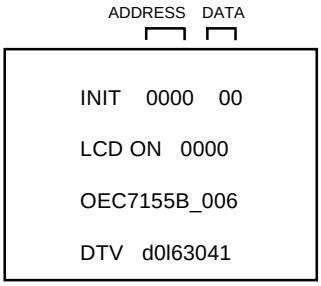


FIG. 2

4. ADDRESS is now selected and should "blink". Using the UP/DOWN buton on the remote, step through the ADDRESS until required ADDRESS to be changed is reached.
5. Press RIGHT/LEFT button to select DATA. When DATA is selected, it will "blink".
6. Again, step through the DATA using UP/DOWN button until required DATA value has been selected.
7. Pressing RIGHT/LEFT button will take you back to ADDRESS for further selection if necessary.
8. Repeat steps 4 to 6 until all data has been checked.
9. When satisfied correct DATA has been entered, turn POWER off (return to STANDBY MODE) to finish DATA input.

After the data input, set to the initializing of shipping.

10. Turn POWER on.
11. Press both VOL. DOWN button on the set and Channel button **(1)** on the remote control for more than 2 seconds.
12. After the finishing of the initializing of shipping, the unit will turn off automatically.

The unit will now have the correct DATA for the new MEMORY IC.

ELECTRICAL ADJUSTMENTS

1. ADJUSTMENT PROCEDURE

Read and perform these adjustments when repairing the circuits or replacing electrical parts or PCB assemblies.

CAUTION

- Use an isolation transformer when performing any service on this chassis.
- When removing a PCB or related component, after unfastening or changing a wire, be sure to put the wire back in its original position.
- When you exchange IC and Transistor with a heat sink, apply silicon grease **(YG6260M)** on the contact section of the heat sink. Before applying new silicon grease, remove all the old silicon grease. (Old grease may cause damage to the IC and Transistor).

Prepare the following measurement tools for electrical adjustments.

1. Pattern Generator

2. BASIC ADJUSTMENTS

On-Screen Display Adjustment

1. Set the VOLUME to minimum.
2. Press the VOL. DOWN button on the set and the channel button **(9)** on the remote control for more than 2 seconds to display adjustment mode on the screen as shown in **Fig. 2-1**.

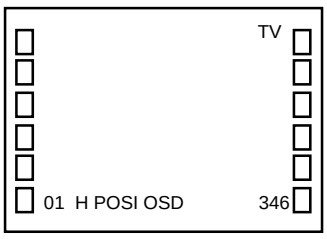


Fig. 2-1

3. Use the UP/DOWN button or Channel button **(0-9)** on the remote control to select the options shown in **Fig. 2-2**.
4. Press the MENU button on the remote control to end the adjustments.
5. To display the adjustment screen for AV, YUV, HDMI mode, press the INPUT button on the remote control to set to the AV, YUV, HDMI. To display the adjustment screen for DVD mode, press the TV/DVD button on the remote control to set to the DVD. Press the VOL.DOWN button on the set and the channel **(9)** on the remote control for more than 2 seconds.

NO.	FUNCTION	NO.	FUNCTION
01	H POSI OSD	22	H POSI 60Hz
02	V POSI OSD	24	V POSI 60Hz
03	R DRIVE (N)	25	BAK LIGHT CENT
04	R CUTOFF (N)	26	BAK LIGHT MAX
05	G DRIVE (N)	27	BAK LIGHT MIN
06	G CUTOFF (N)	28	BRIGHT CENT
07	B DRIVE (N)	29	BRIGHT MAX
08	B CUTOFF (N)	30	BRIGHT MIN
09	R DRIVE (C)	31	TINT
10	R CUTOFF (C)	35	CONTRAST CENTER
11	G DRIVE (C)	36	CONTRAST MAX
12	G CUTOFF (C)	37	CONTRAST MIN
13	B DRIVE (C)	38	COLOR CENT
14	B CUTOFF (C)	39	COLOR MAX
15	R DRIVE (W)	40	COLOR MIN
16	R CUTOFF (W)	63	CONTRAST 40
17	G DRIVE (W)	64	BRIGHT (3F54)
18	G CUTOFF (W)	65	CONTRAST (3F55)
19	B DRIVE (W)	66	SRC TOP
20	B CUTOFF (W)	67	DFEA VIMGVT

Fig. 2-2

2-1: WHITE BALANCE

1. Place the set in Aging Test for more than 15 minutes.
2. Receive the gray scale pattern from the Pattern Generator.
3. Press the INPUT button on the remote control to set to the AV mode.
4. Using the remote control, set the brightness and contrast to normal position.
5. Activate the adjustment mode display of **Fig. 1-1** and press the channel button **(03)** on the remote control to select “R DRIVE (N)”.
6. Press the UP/DOWN button on the remote control to select the “R CUTOFF (N)”, “B DRIVE (N)”, “B CUTOFF (N)”, “R DRIVE (C)”, “R CUTOFF (C)”, “B DRIVE (C)”, “B CUTOFF (C)”, “R DRIVE (W)”, “R CUTOFF (W)”, “B DRIVE (W)” and “B CUTOFF (W)”.
7. Adjust the RIGHT/LEFT button on the remote control to whiten the R CUTOFF (N), B DRIVE (N), B CUTOFF (N), R DRIVE (C), R CUTOFF (C), B DRIVE (C), B CUTOFF (C), R DRIVE (W), R CUTOFF (W), B DRIVE (W) and B CUTOFF (W) at each step tone sections equally.
8. Perform the above adjustments 5 and 6 until the white color is looked like a white.

ELECTRICAL ADJUSTMENTS

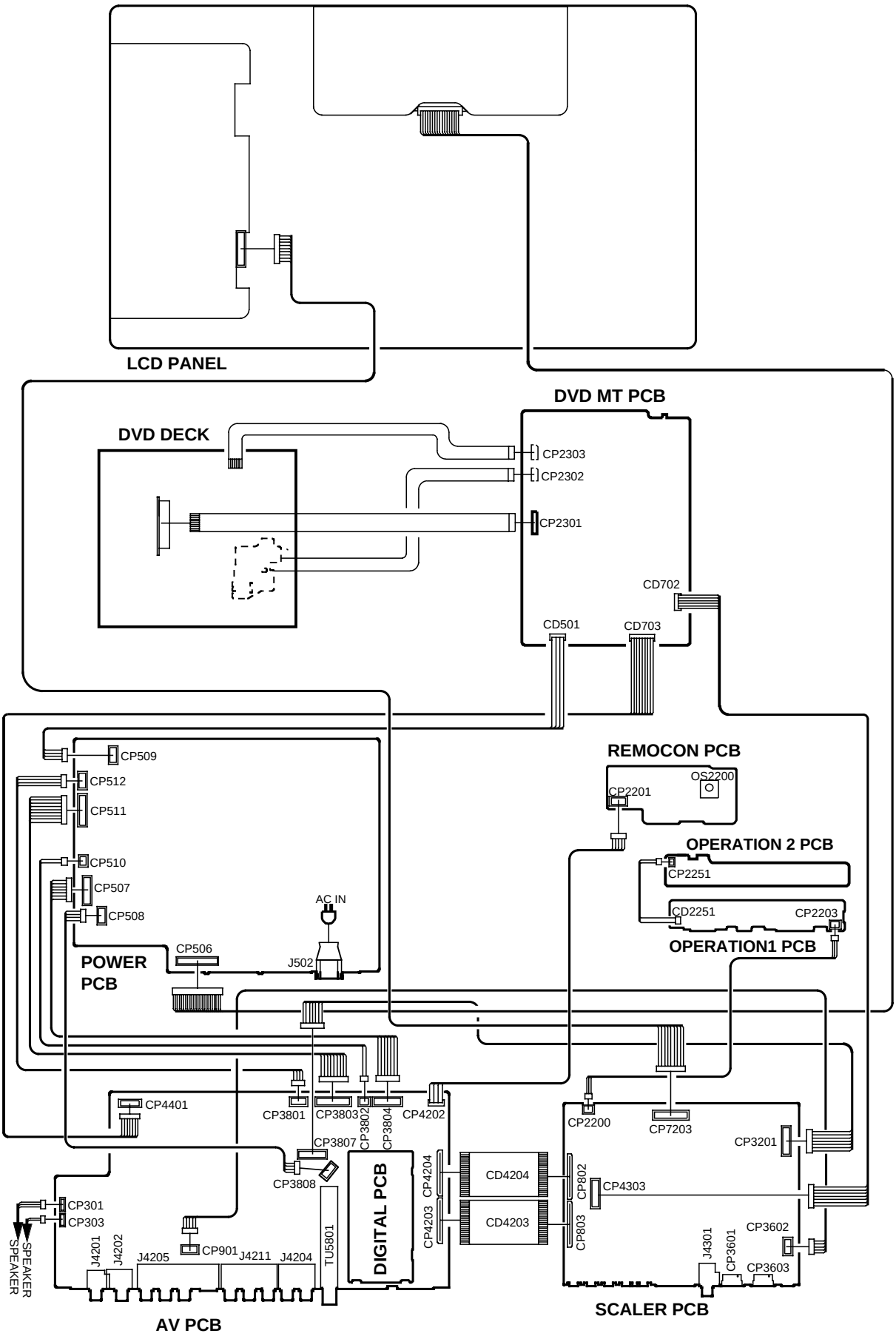
2-2: Confirmation of Fixed Value (Step No.)

Please check if the fixed values of each of the adjustment items are set correctly referring below. **(TV/AV/YUV/HD-MI/DVD)**

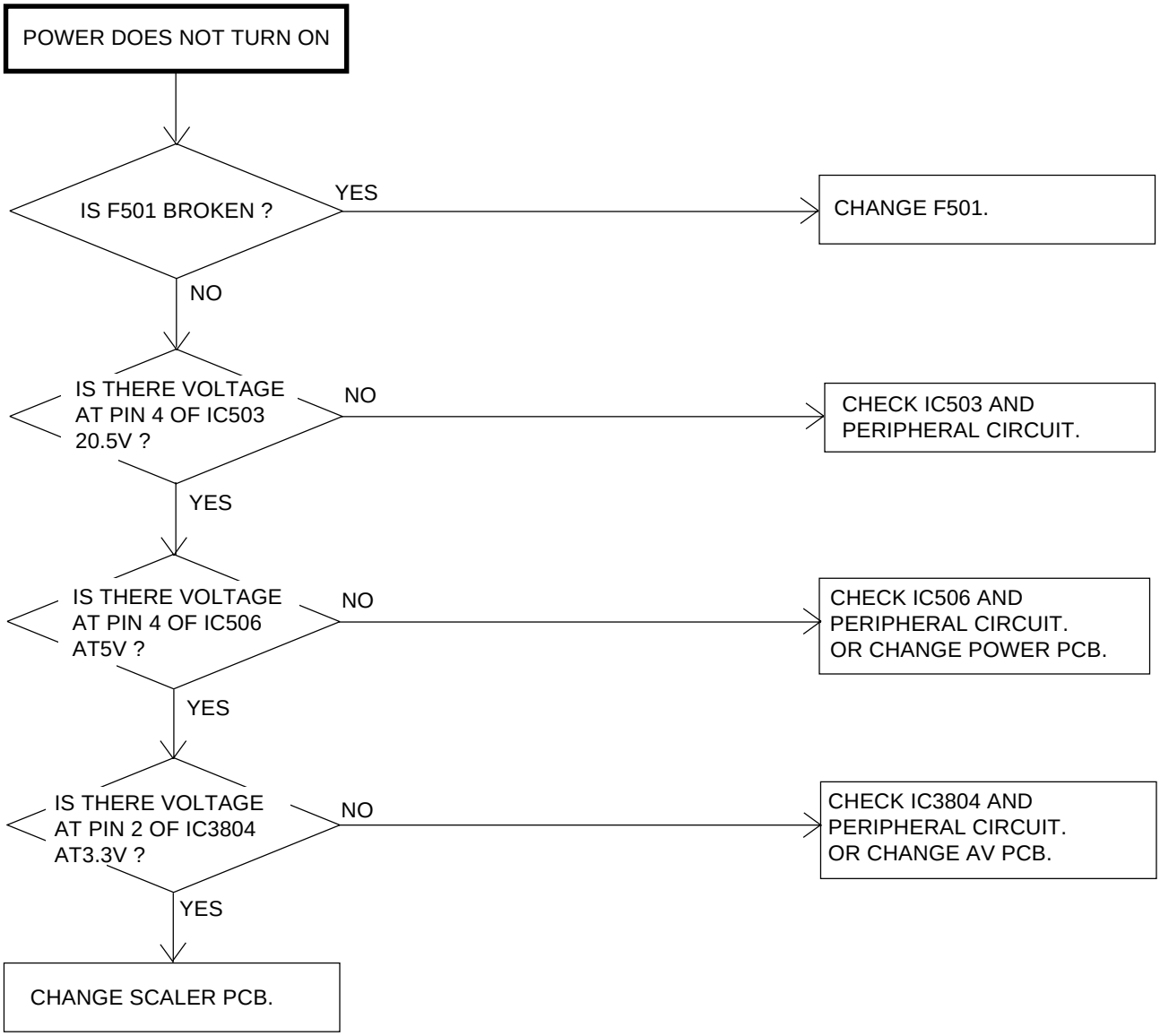
NO.	FUNCTION	TV	TV 720p	AV	AV (S)	YUV				HD-MI					DVD
						480i	480p	720p	1080i	480i	480p	720p	1080i	VGA	
		Step No.													
1	H POSI OSD	346	346	346	346	346	346	346	346	346	346	346	346	346	346
2	V POSI OSD	83	83	83	83	83	83	83	83	83	83	83	83	83	83
5	G DRIVE (N)	128	128	128	128	128	128	128	128	128	128	128	128	128	128
6	G CUTOFF (N)	128	128	128	128	128	128	128	128	128	128	128	128	128	128
11	G DRIVE (C)	128	128	128	128	128	128	128	128	128	128	128	128	128	128
12	G CUTOFF (C)	128	128	128	128	128	128	128	128	128	128	128	128	128	128
17	G DRIVE (W)	128	128	128	128	128	128	128	128	128	128	128	128	128	128
18	G CUTOFF (W)	128	128	128	128	128	128	128	128	128	128	128	128	128	128
22	H POSI 60Hz	276	320	276	276	276	134	322	122	266	134	284	228	156	276
22	H POSI (SIDE BAR)	284	322	284	284	284	140	...	...	274	140	...	...	160	284
24	V POSI 60Hz	23	63	23	23	34	34	55	38	35	34	54	38	34	23
25	BAK LIGHT CENT	128	128	128	128	128	128	128	128	128	128	128	128	128	128
26	BAK LIGHT MAX	255	255	255	255	255	255	255	255	255	255	255	255	255	255
27	BAK LIGHT MIN	00	00	00	00	00	00	00	00	00	00	00	00	00	00
28	BRIGHT CENT	126	126	126	126	126	126	126	126	126	126	126	126	126	126
29	BRIGHT MAX	156	156	156	156	156	156	156	156	156	156	156	156	156	156
30	BRIGHT MIN	70	70	70	70	70	70	70	70	70	70	70	70	70	70
31	TINT	108	128	109	116	115	122	122	122	122	132	131	132	132	120
37	CONTRAST MIN(N)	50	50	50	50	50	50	50	50	50	50	50	50	50	50
38	COLOR CENT	75	115	92	94	83	115	115	115	77	77	77	77	77	91
39	COLOR MAX	127	127	127	127	127	127	127	127	127	127	127	127	127	127
40	COLOR MIN	00	00	00	00	00	00	00	00	00	00	00	00	00	00
64	BRIGHT (3F54)	---	128	---	---	---	126	128	128	113	113	113	113	113	---
65	CONTRAST (3F55)	---	180	---	---	---	182	180	180	122	122	122	122	122	---
66	SRC TOP(STRECH)	20	20	20	20	20	20	20	20	20	20	20	20	20	20
66	SRC TOP(SIDE BAR)	20	20	20	20	20	20	---	---	20	20	---	---	20	20
66	SRC TOP(CINEMA WIDE1)	18	20	18	18	20	20	---	---	20	20	---	---	20	18
66	SRC TOP(ZOOM)	43	43	43	43	43	43	---	---	43	43	---	---	43	43
66	SRC TOP(S.STRECH)	26	26	26	26	26	26	---	---	26	26	---	---	26	26
67	DEFA VIMGVT(STRECH)	20	25	20	20	20	43	26	24	20	44	32	24	42	20
67	DEFA VIMGVT(SIDE BAR)	20	25	20	20	20	43	---	---	20	43	---	---	42	20
67	DEFA VIMGVT(CINEMA WIDE1)	20	28	20	20	20	44	---	---	20	44	---	---	42	20
67	DEFA VIMGVT(ZOOM)	50	28	50	50	50	104	---	---	50	104	---	---	102	50
67	DEFA VIMGVT(S.STRECH)	26	25	26	26	26	56	---	---	26	56	---	---	55	26

ELECTRICAL ADJUSTMENTS

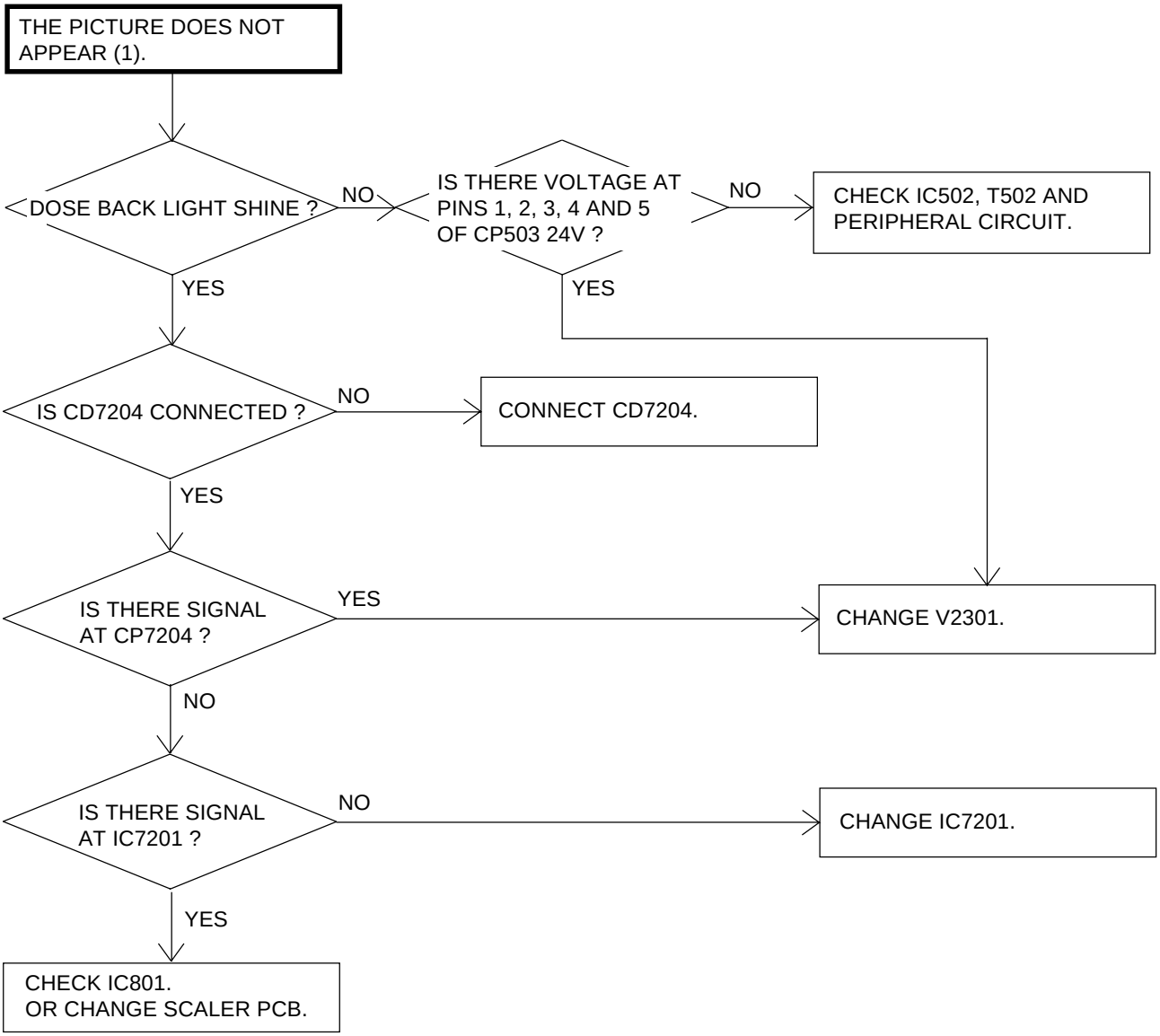
3. ELECTRICAL ADJUSTMENT PARTS LOCATION GUIDE (WIRING CONNECTION)



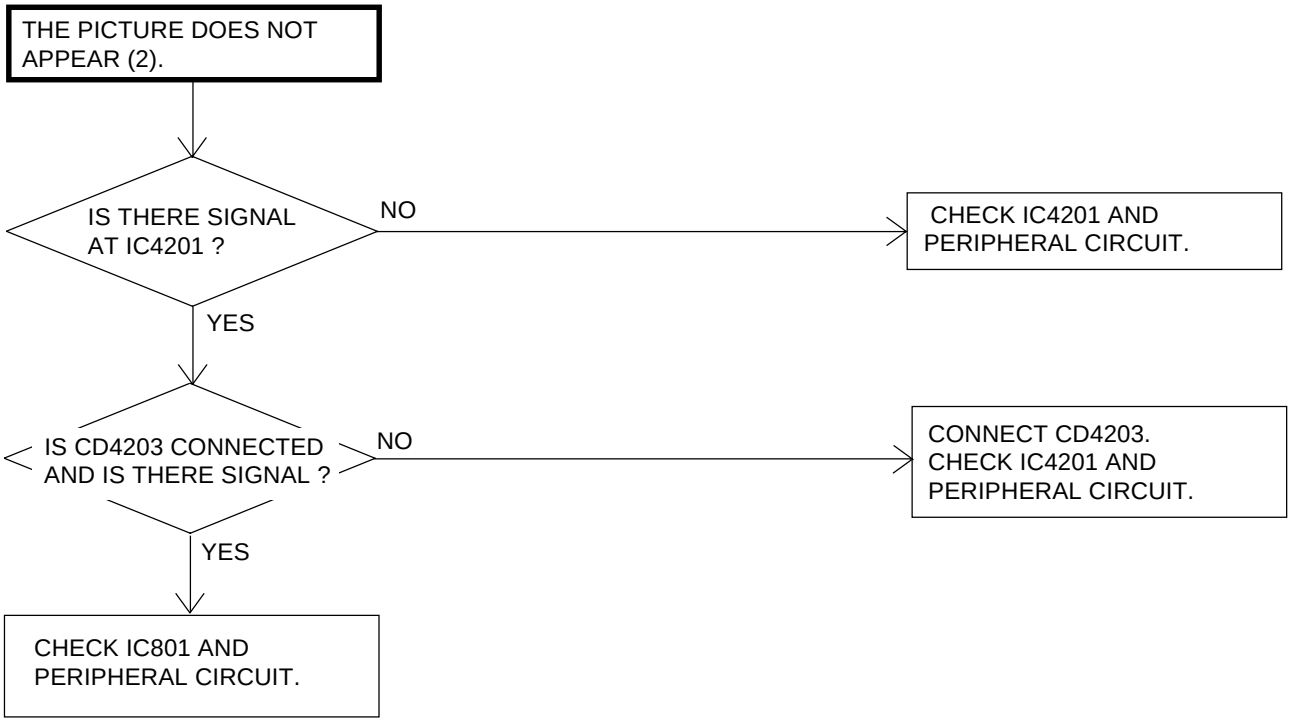
TROUBLESHOOTING GUIDE


POWER DOES NOT TURN ON
IS F501 BROKEN ?
YES
CHANGE F501.
NO
IS THERE VOLTAGE AT PIN 4 OF IC503 20.5V ?
NO
CHECK IC503 AND PERIPHERAL CIRCUIT.
YES
IS THERE VOLTAGE AT PIN 4 OF IC506 AT5V ?
NO
CHECK IC506 AND PERIPHERAL CIRCUIT. OR CHANGE POWER PCB.
YES
IS THERE VOLTAGE AT PIN 2 OF IC3804 AT3.3V ?
NO
CHECK IC3804 AND PERIPHERAL CIRCUIT. OR CHANGE AV PCB.
YES
CHANGE SCALER PCB.

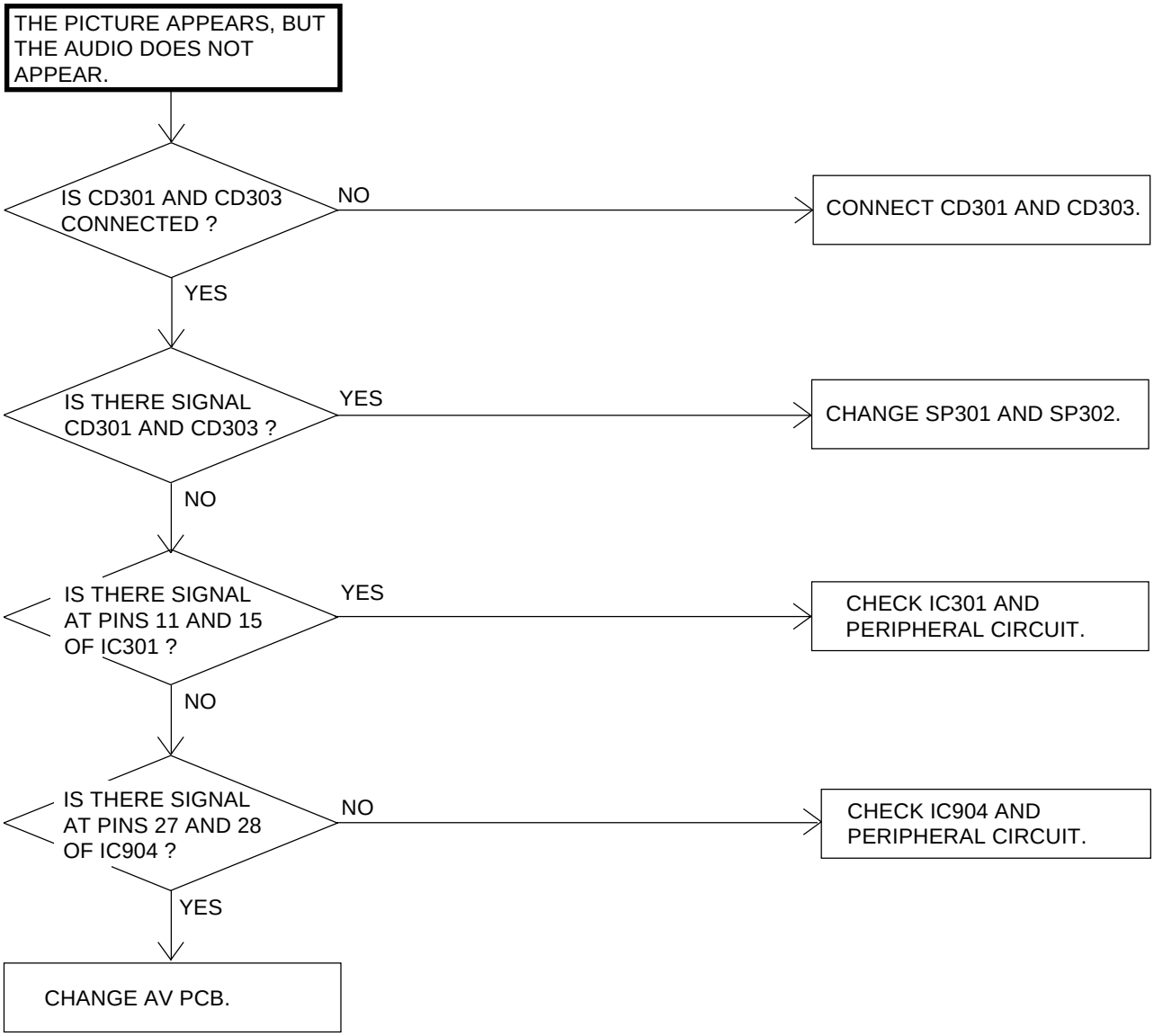
TROUBLESHOOTING GUIDE



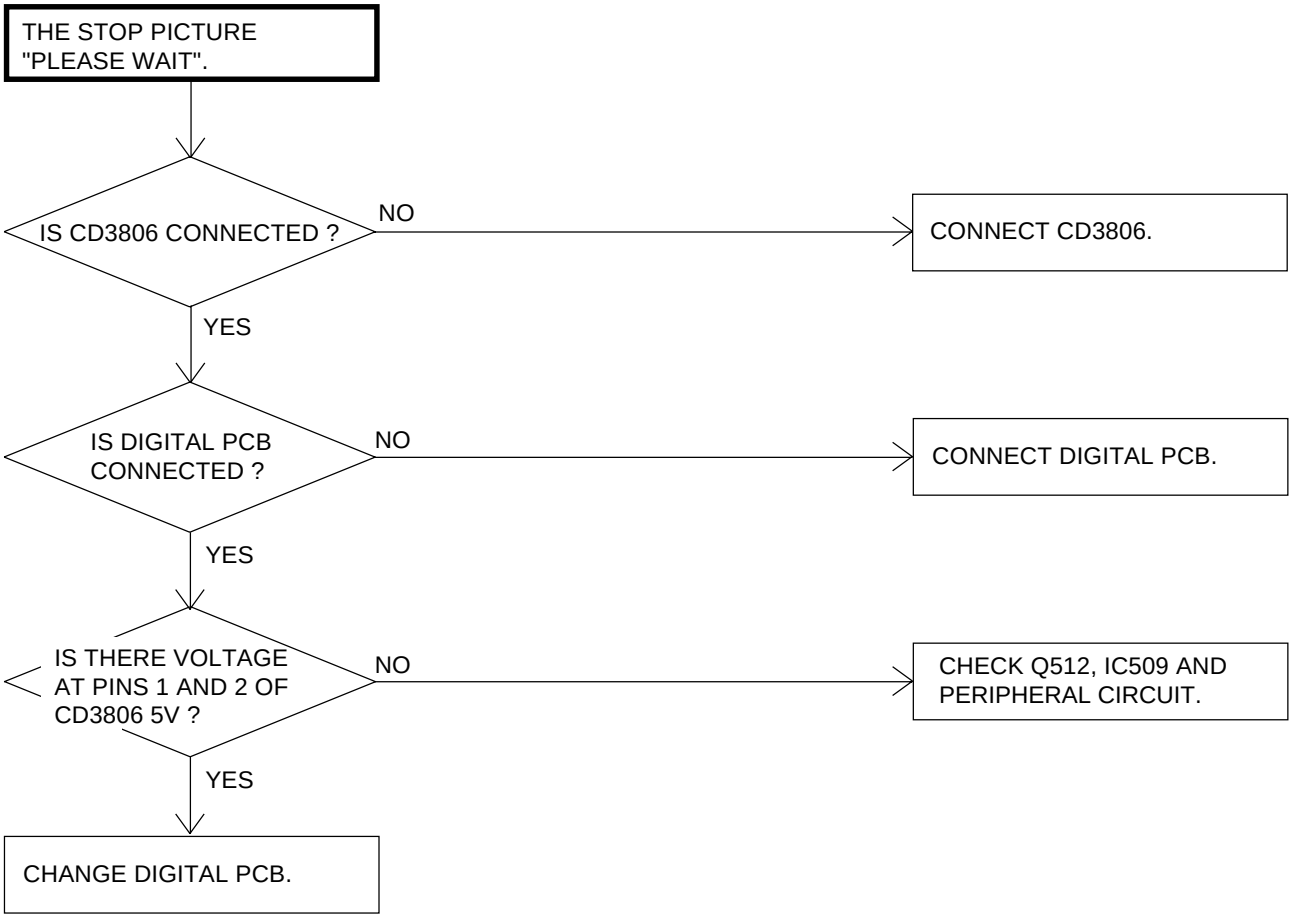
TROUBLESHOOTING GUIDE


THE PICTURE DOES NOT APPEAR (2).
IS THERE SIGNAL AT IC4201 ?
NO
CHECK IC4201 AND PERIPHERAL CIRCUIT.
YES
IS CD4203 CONNECTED AND IS THERE SIGNAL ?
NO
CONNECT CD4203. CHECK IC4201 AND PERIPHERAL CIRCUIT.
YES
CHECK IC801 AND PERIPHERAL CIRCUIT.

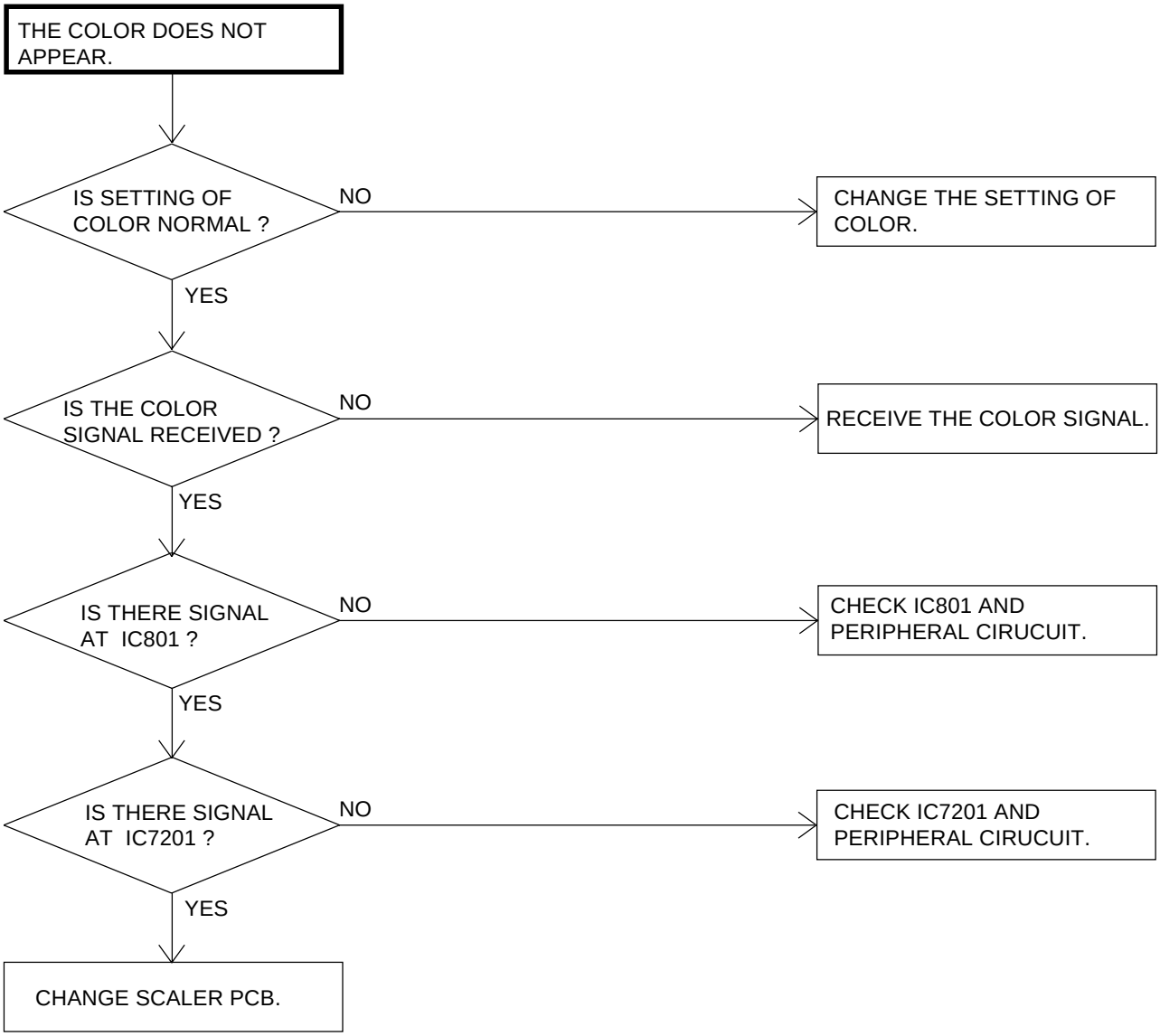
TROUBLESHOOTING GUIDE


THE PICTURE APPEARS, BUT THE AUDIO DOES NOT APPEAR.
IS CD301 AND CD303 CONNECTED ?
NO
CONNECT CD301 AND CD303.
YES
IS THERE SIGNAL CD301 AND CD303 ?
YES
CHANGE SP301 AND SP302.
NO
IS THERE SIGNAL AT PINS 11 AND 15 OF IC301 ?
YES
CHECK IC301 AND PERIPHERAL CIRCUIT.
NO
IS THERE SIGNAL AT PINS 27 AND 28 OF IC904 ?
NO
CHECK IC904 AND PERIPHERAL CIRCUIT.
YES
CHANGE AV PCB.

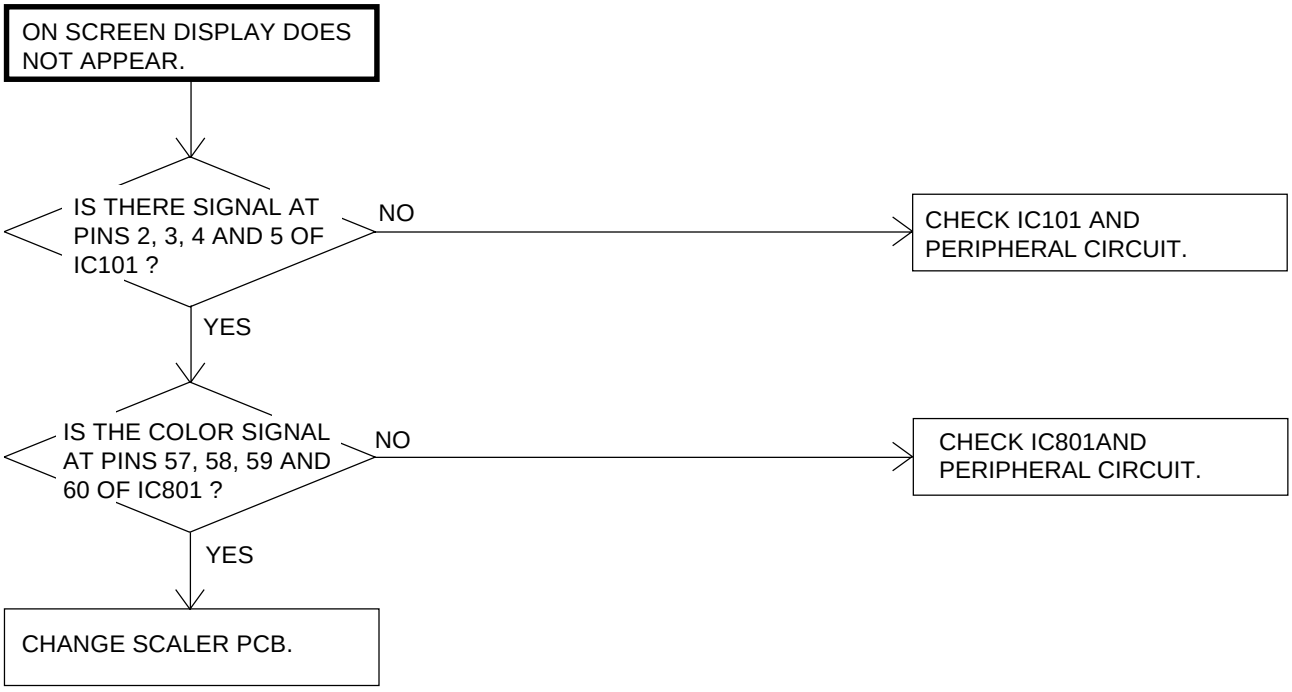
TROUBLESHOOTING GUIDE



TROUBLESHOOTING GUIDE

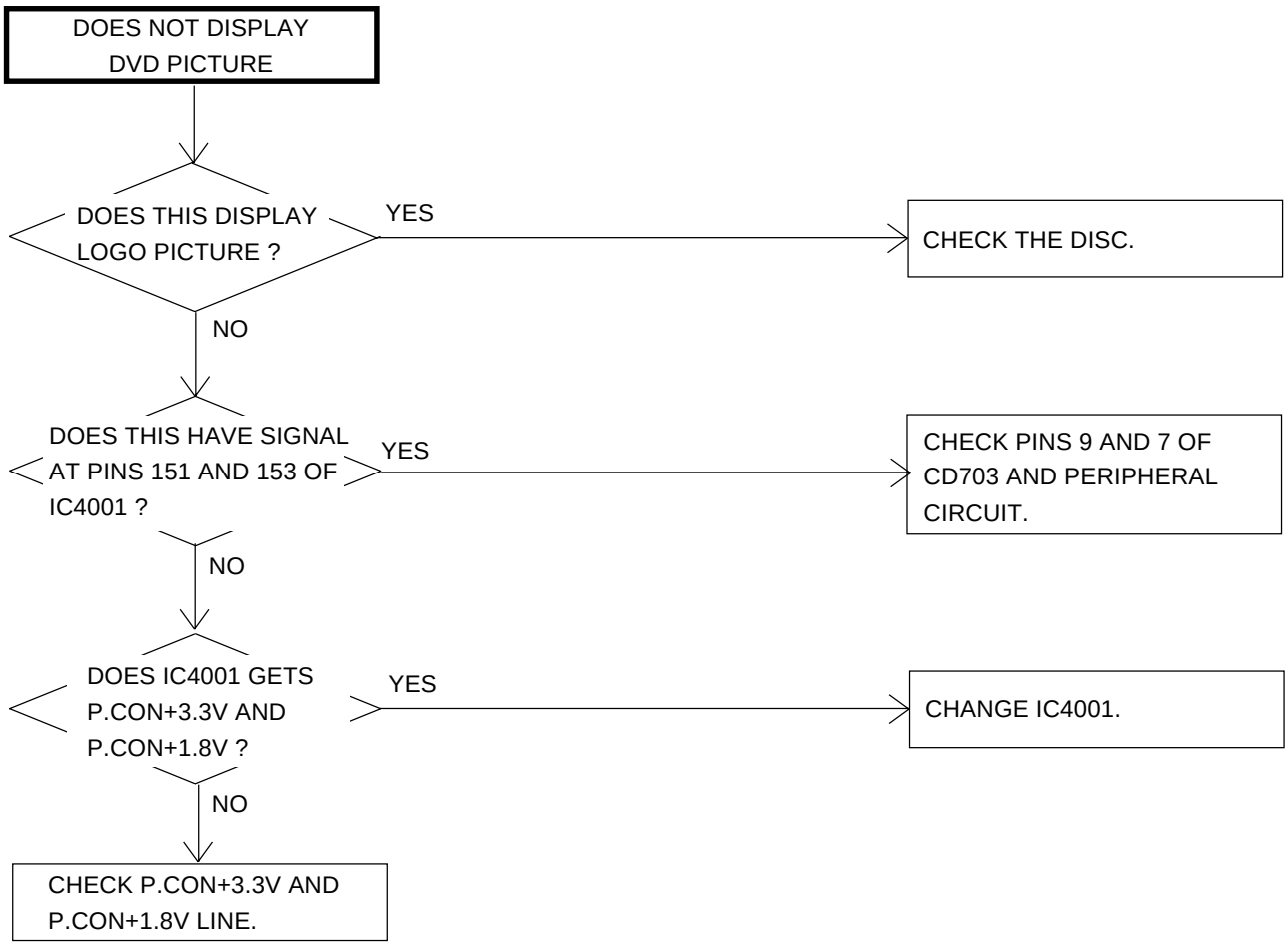


TROUBLESHOOTING GUIDE

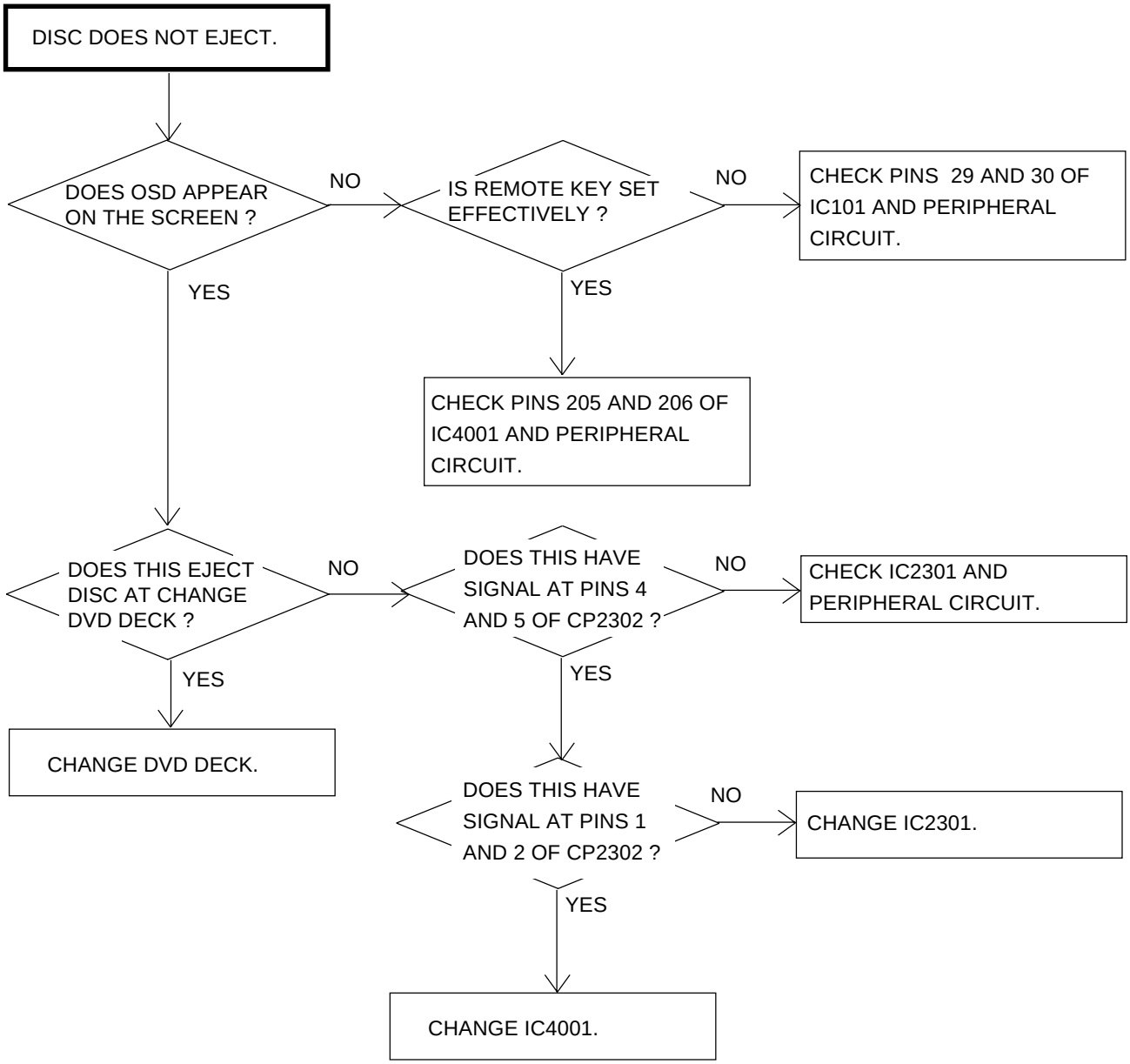

ON SCREEN DISPLAY DOES NOT APPEAR.
IS THERE SIGNAL AT PINS 2, 3, 4 AND 5 OF IC101 ?
NO
CHECK IC101 AND PERIPHERAL CIRCUIT.
YES
IS THE COLOR SIGNAL AT PINS 57, 58, 59 AND 60 OF IC801 ?
NO
CHECK IC801AND PERIPHERAL CIRCUIT.
YES
CHANGE SCALER PCB.

TROUBLESHOOTING GUIDE

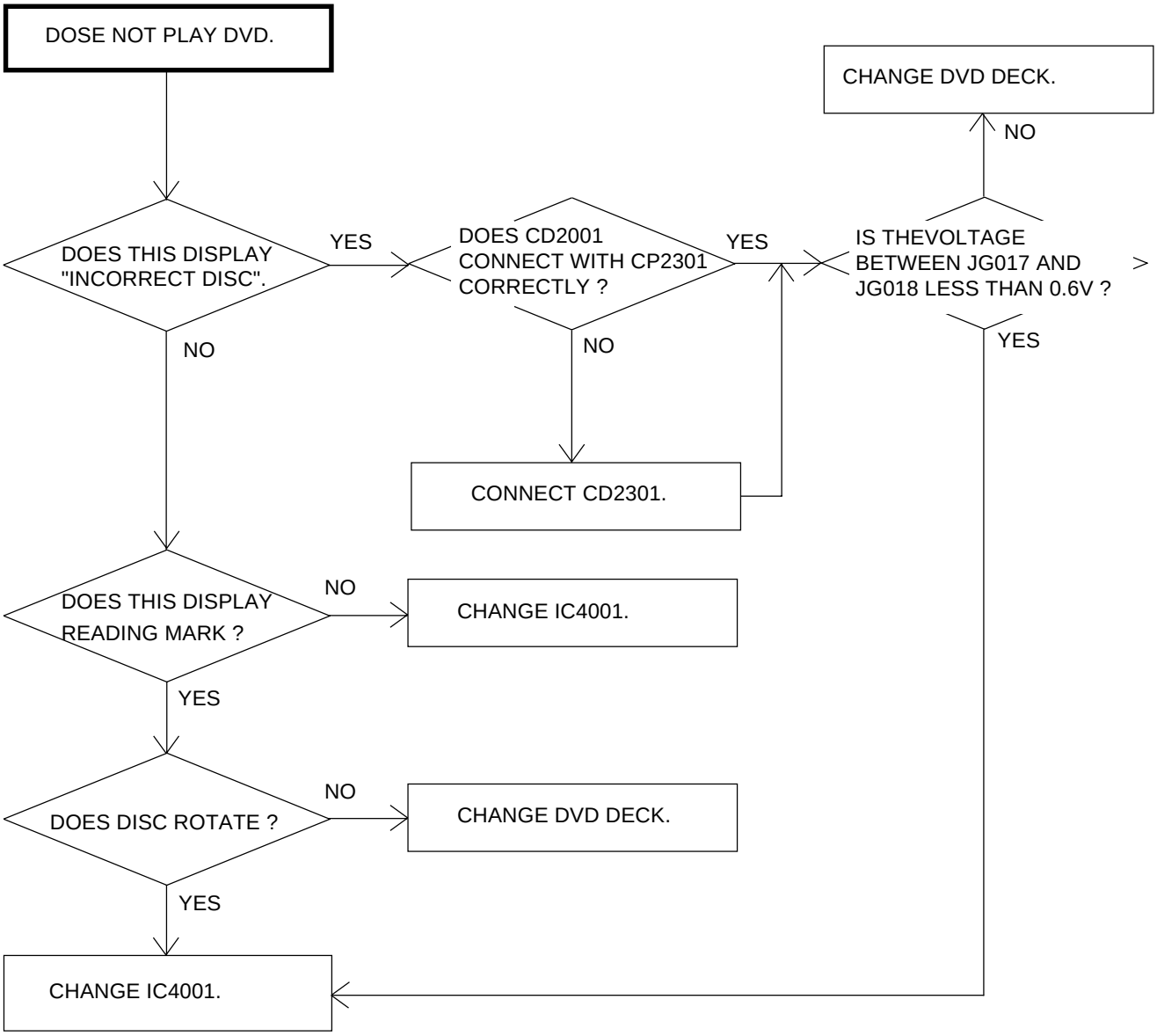
(DVD SECTION)


DOES NOT DISPLAY DVD PICTURE
DOES THIS DISPLAY LOGO PICTURE ?
YES
CHECK THE DISC.
NO
DOES THIS HAVE SIGNAL AT PINS 151 AND 153 OF IC4001 ?
YES
CHECK PINS 9 AND 7 OF CD703 AND PERIPHERAL CIRCUIT.
NO
DOES IC4001 GETS P.CON+3.3V AND P.CON+1.8V ?
YES
CHANGE IC4001.
NO
CHECK P.CON+3.3V AND P.CON+1.8V LINE.

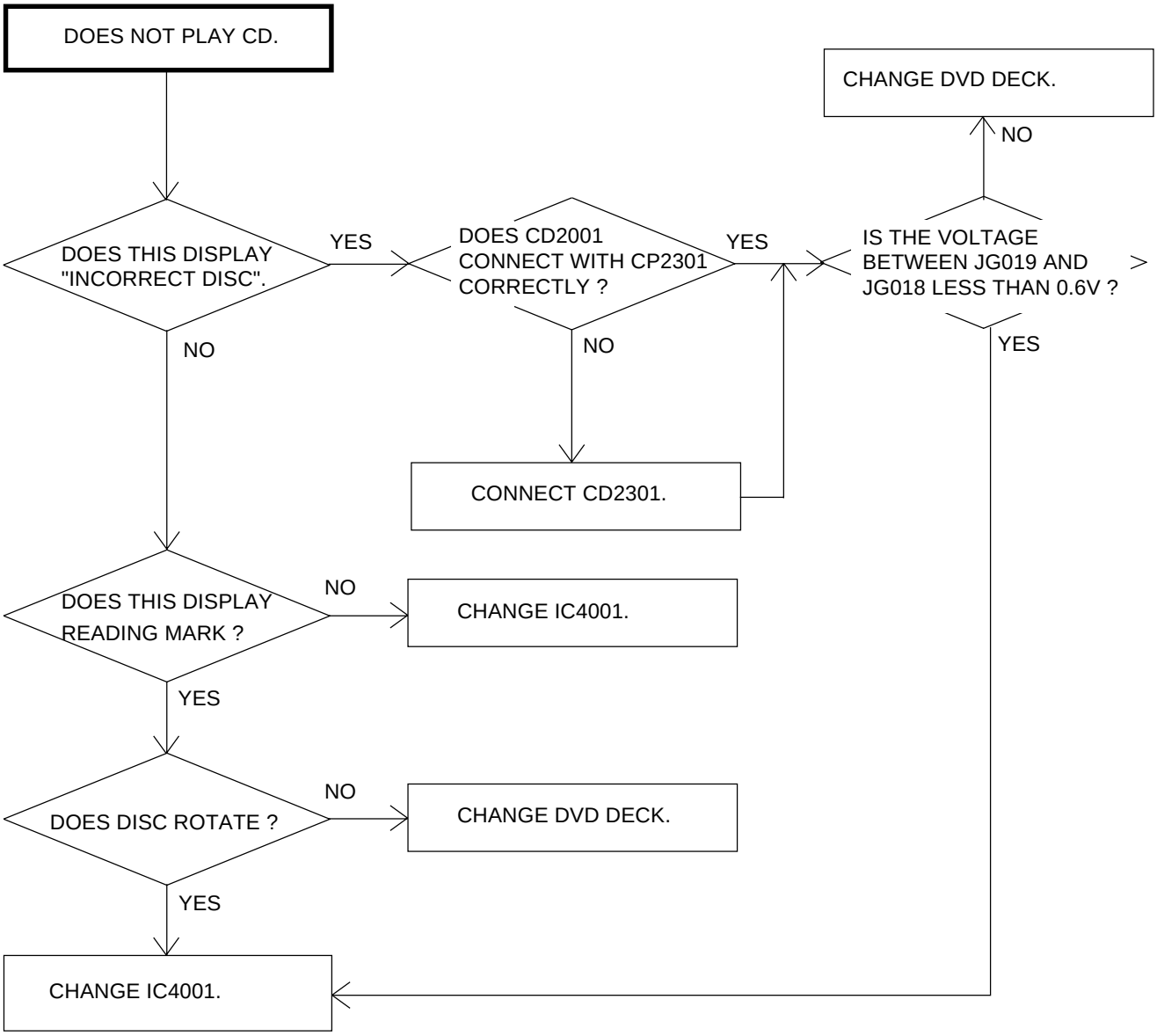
TROUBLESHOOTING GUIDE


DISC DOES NOT EJECT.
DOES OSD APPEAR ON THE SCREEN ?
NO
IS REMOTE KEY SET EFFECTIVELY ?
NO
CHECK PINS 29 AND 30 OF IC101 AND PERIPHERAL CIRCUIT.
YES
YES
CHECK PINS 205 AND 206 OF IC4001 AND PERIPHERAL CIRCUIT.
DOES THIS EJECT DISC AT CHANGE DVD DECK ?
NO
DOES THIS HAVE SIGNAL AT PINS 4 AND 5 OF CP2302 ?
NO
CHECK IC2301 AND PERIPHERAL CIRCUIT.
YES
YES
CHANGE DVD DECK.
DOES THIS HAVE SIGNAL AT PINS 1 AND 2 OF CP2302 ?
NO
CHANGE IC2301.
YES
CHANGE IC4001.

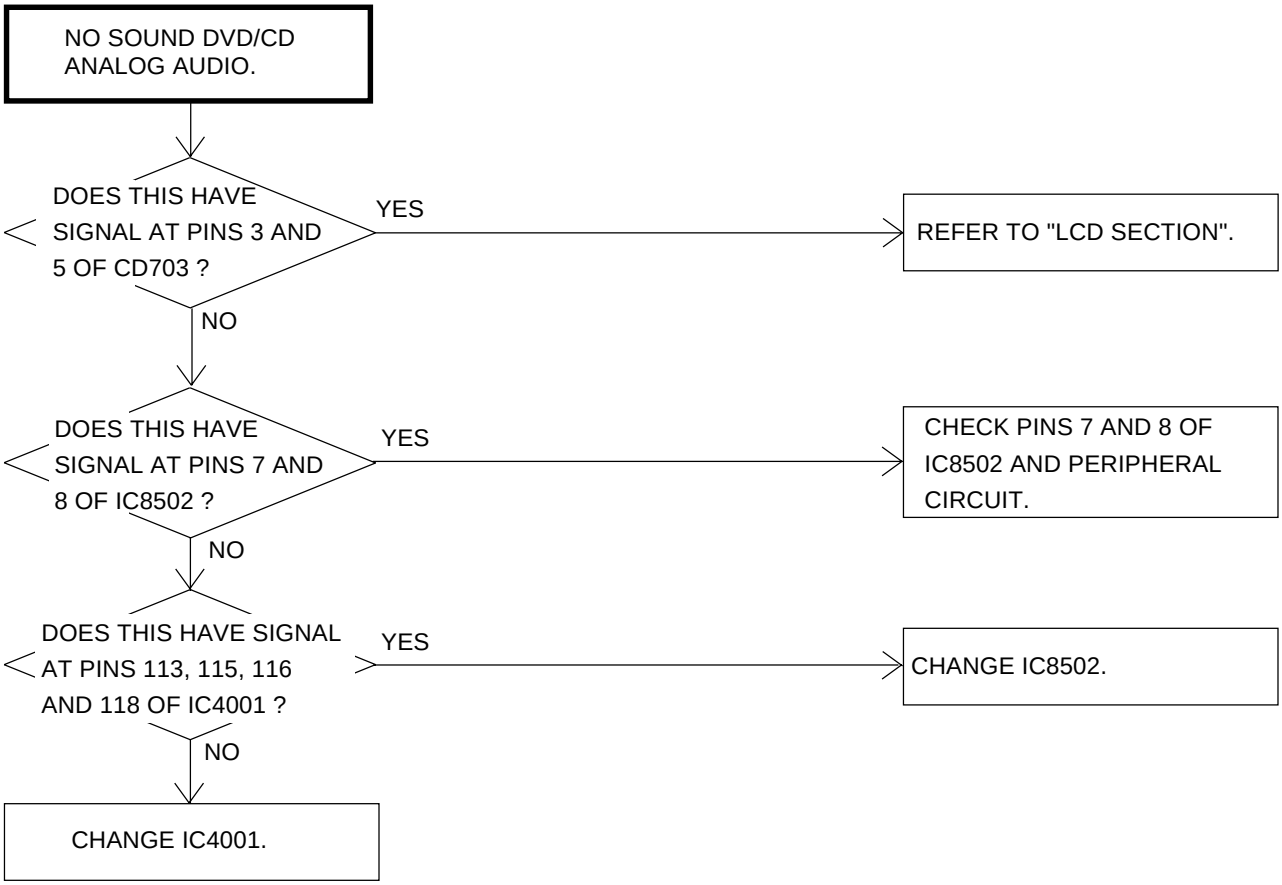
TROUBLESHOOTING GUIDE

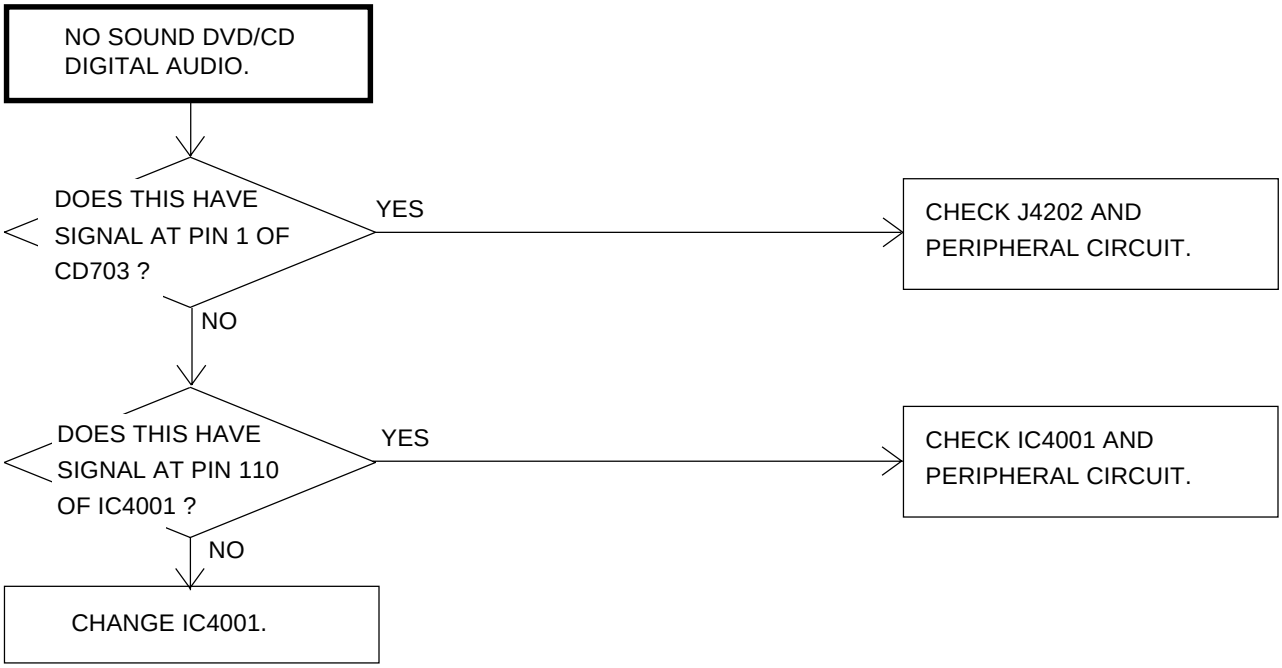


TROUBLESHOOTING GUIDE

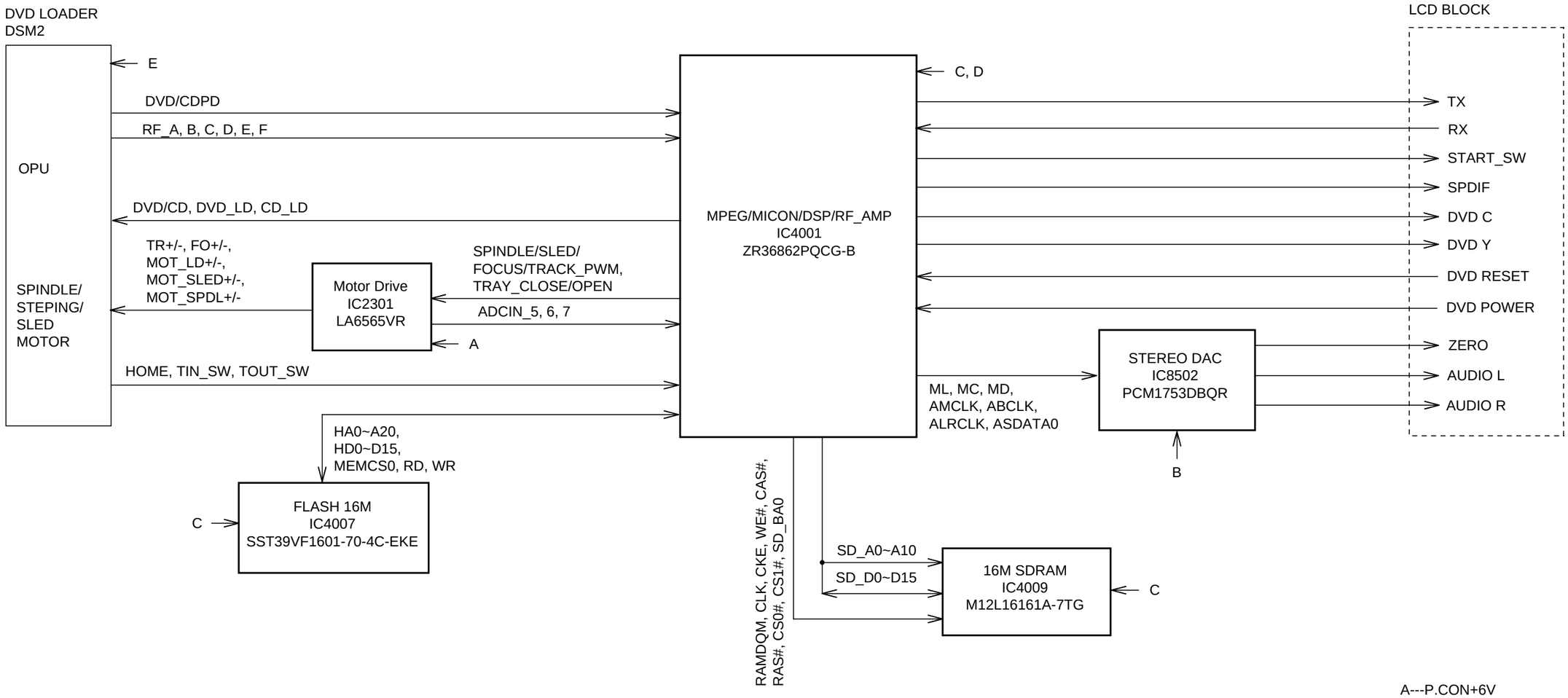


TROUBLESHOOTING GUIDE


NO SOUND DVD/CD ANALOG AUDIO.
DOES THIS HAVE SIGNAL AT PINS 3 AND 5 OF CD703 ?
YES
REFER TO "LCD SECTION".
NO
DOES THIS HAVE SIGNAL AT PINS 7 AND 8 OF IC8502 ?
YES
CHECK PINS 7 AND 8 OF IC8502 AND PERIPHERAL CIRCUIT.
NO
DOES THIS HAVE SIGNAL AT PINS 113, 115, 116 AND 118 OF IC4001 ?
YES
CHANGE IC8502.
NO
CHANGE IC4001.

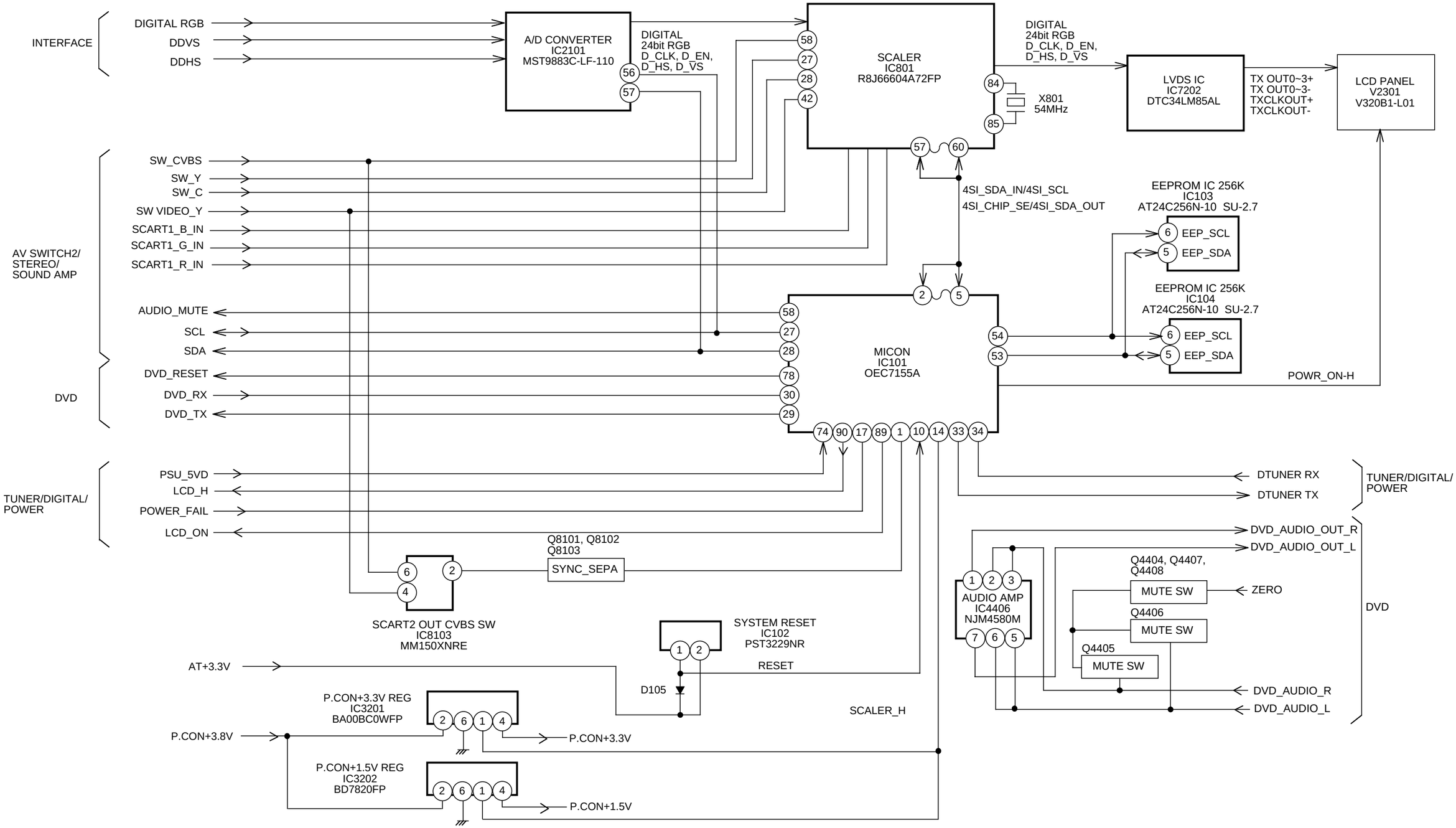

NO SOUND DVD/CD DIGITAL AUDIO.
DOES THIS HAVE SIGNAL AT PIN 1 OF CD703 ?
YES
CHECK J4202 AND PERIPHERAL CIRCUIT.
NO
DOES THIS HAVE SIGNAL AT PIN 110 OF IC4001 ?
YES
CHECK IC4001 AND PERIPHERAL CIRCUIT.
NO
CHANGE IC4001.

DVD BLOCK DIAGRAM

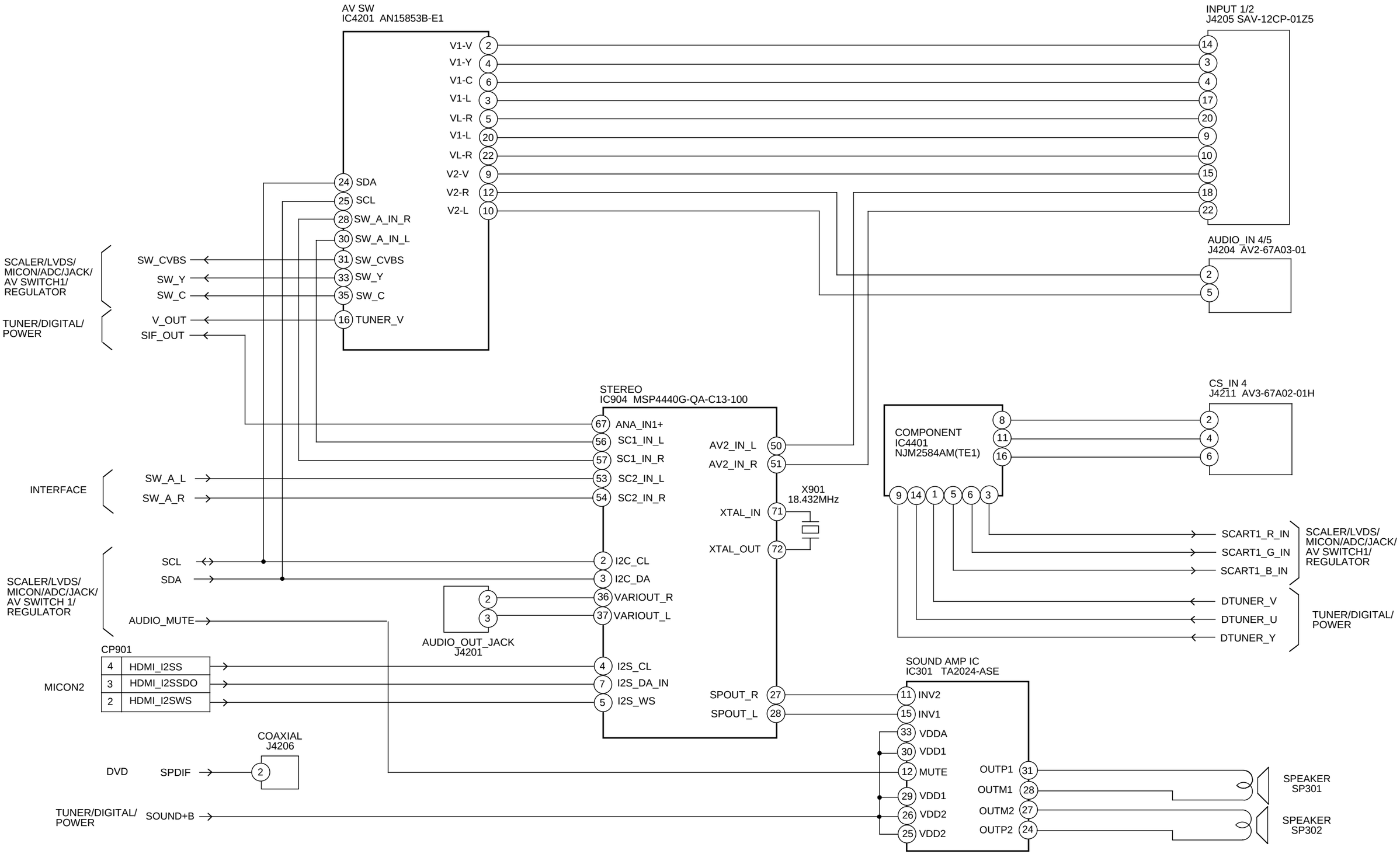


A---P.CON+6V
B---P.CON+5V
C---P.CON+3.3V
D---P.CON+1.8V
E---P.CON+A5V

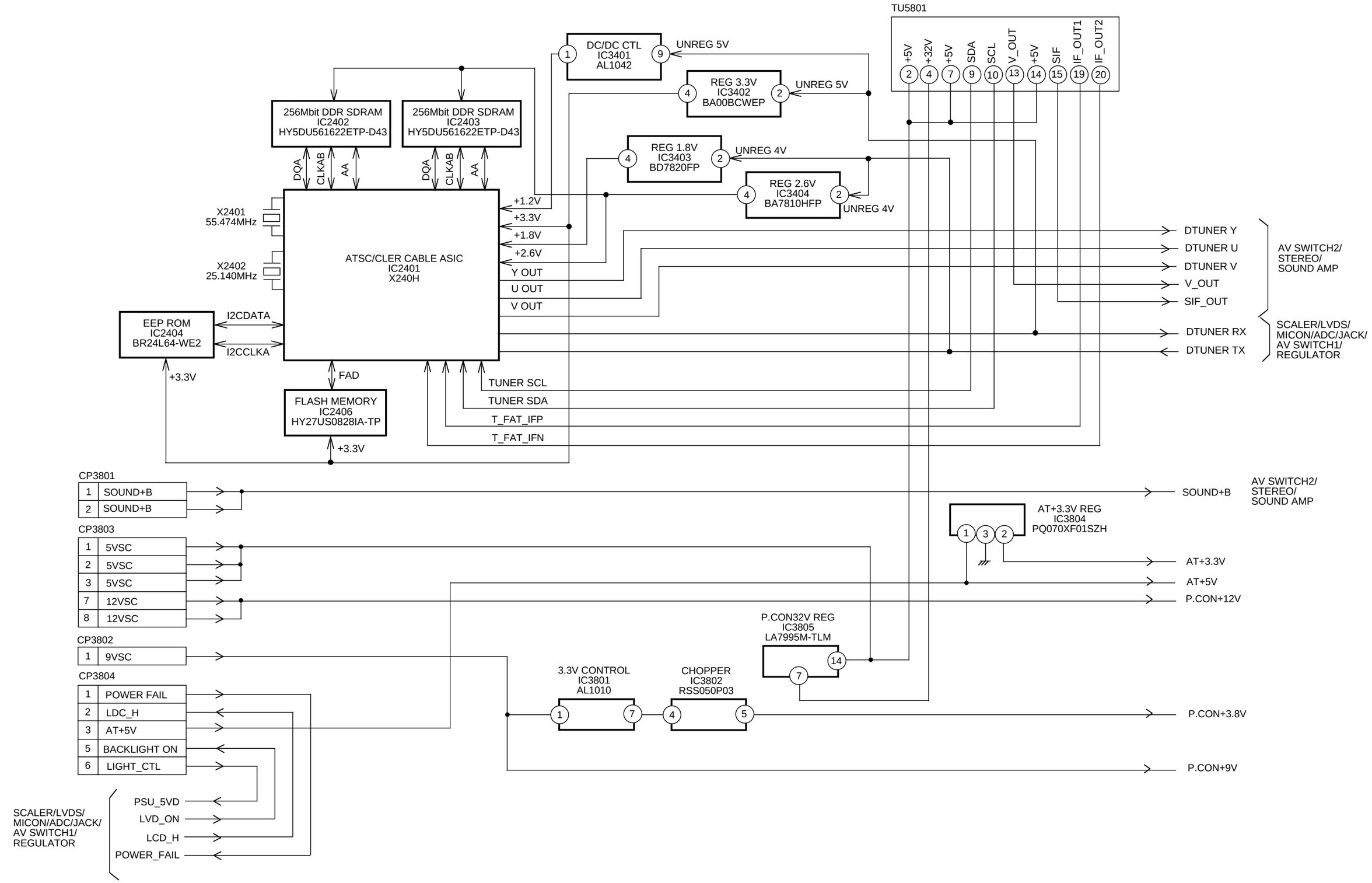
SCALER/LVDS/MICON/ADC/JACK/AV SWITCH1/REGULATOR BLOCK DIAGRAM



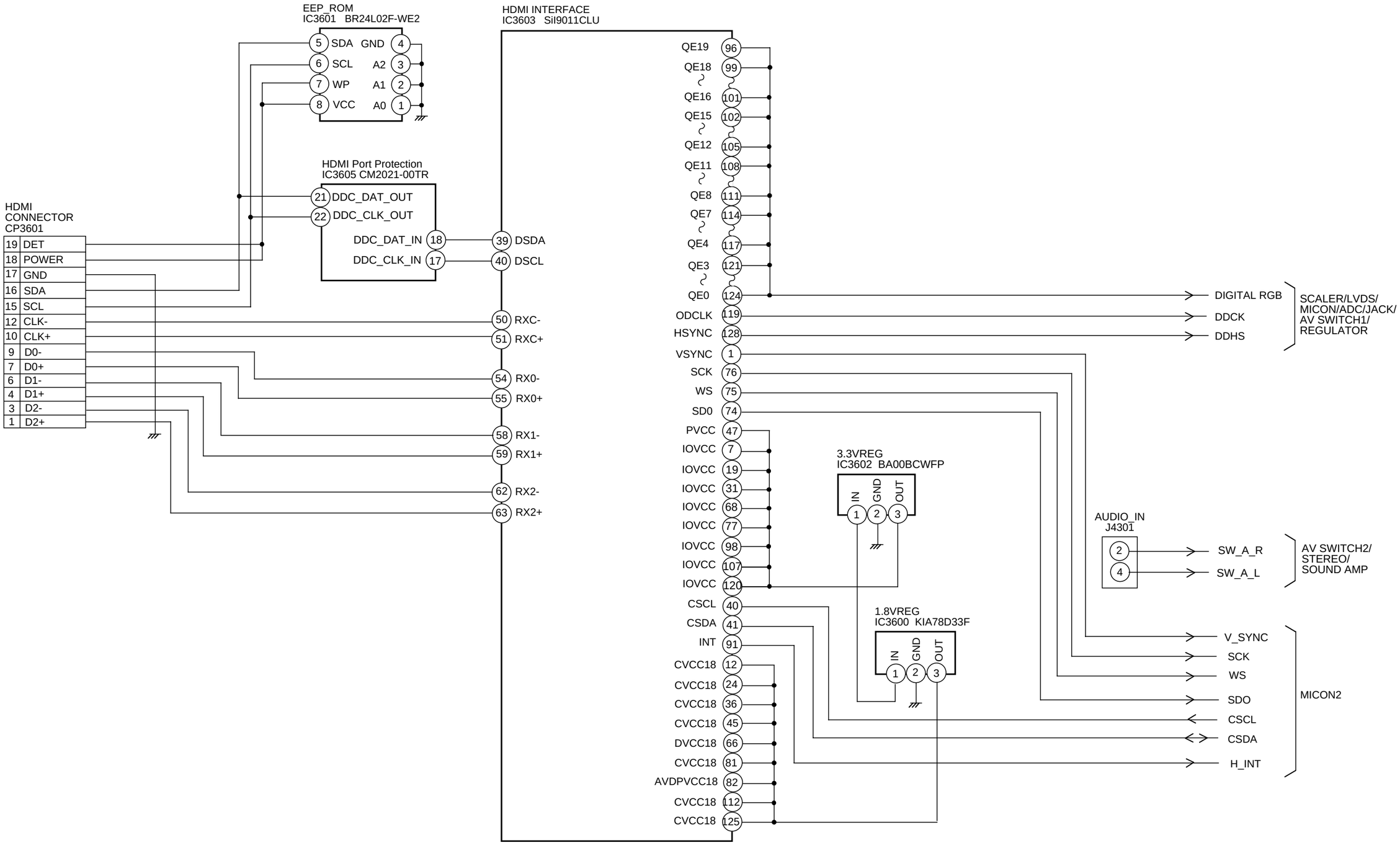
AV SWITCH2/STEREO/SOUND AMP BLOCK DIAGRAM



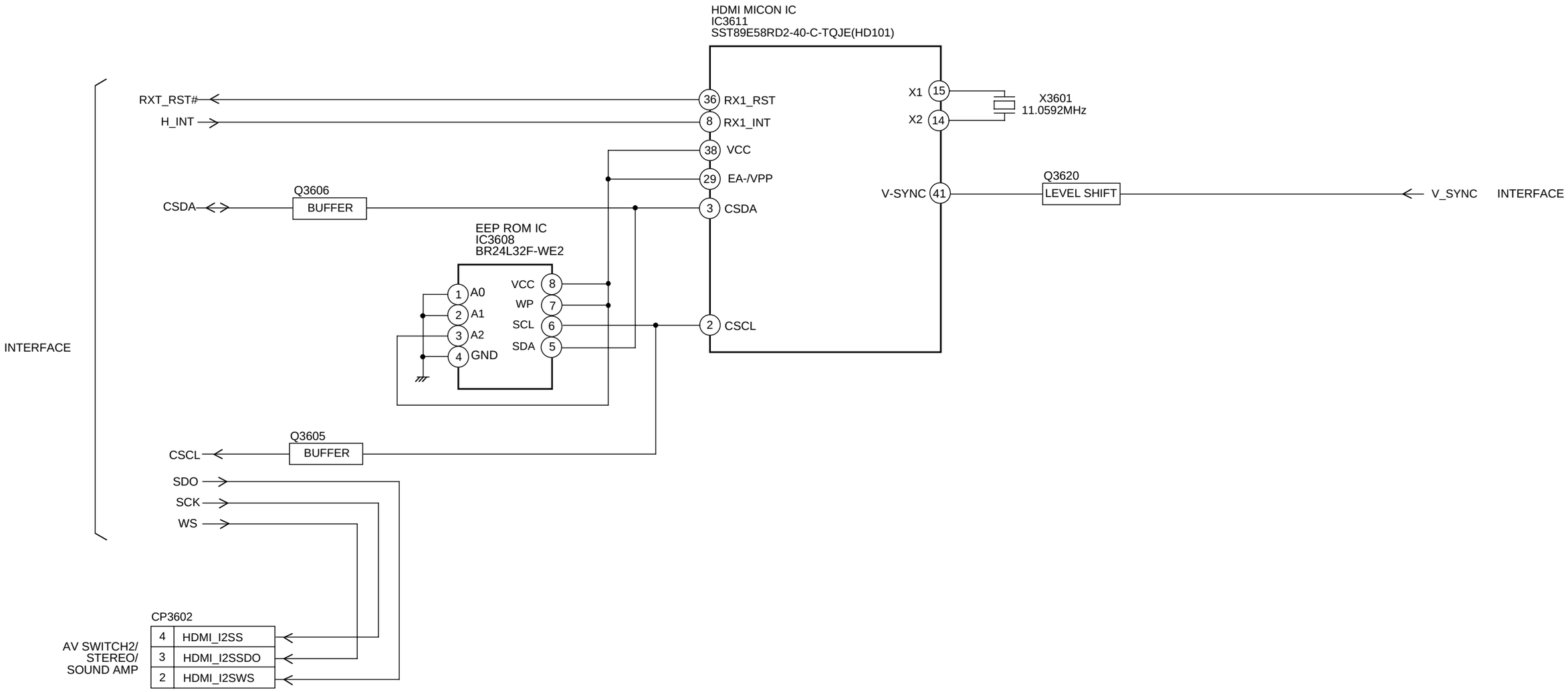
TUNER/DIGITAL/POWER BLOCK DIAGRAM



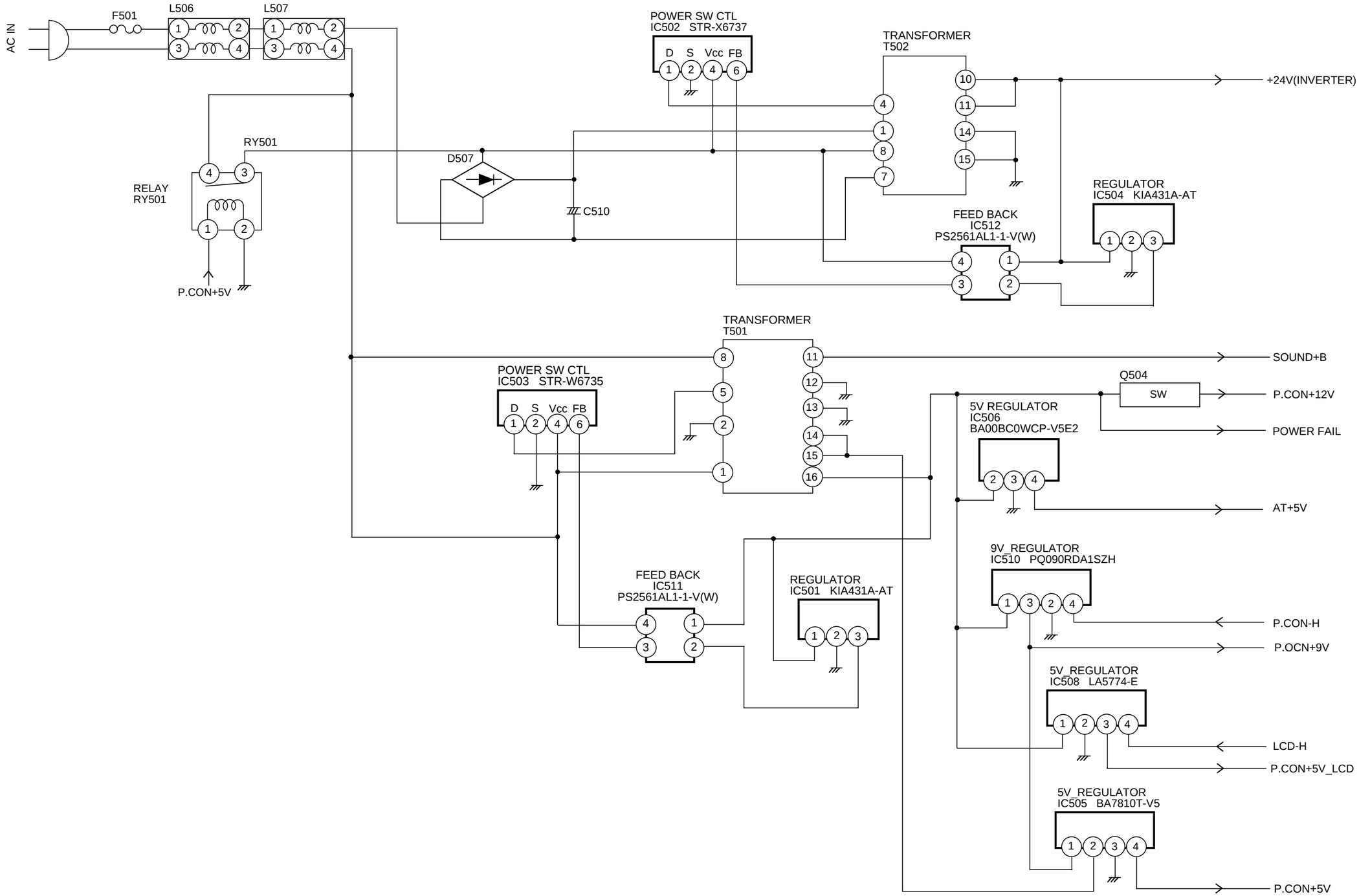
INTERFACE BLOCK DIAGRAM



MICON2 BLOCK DIAGRAM

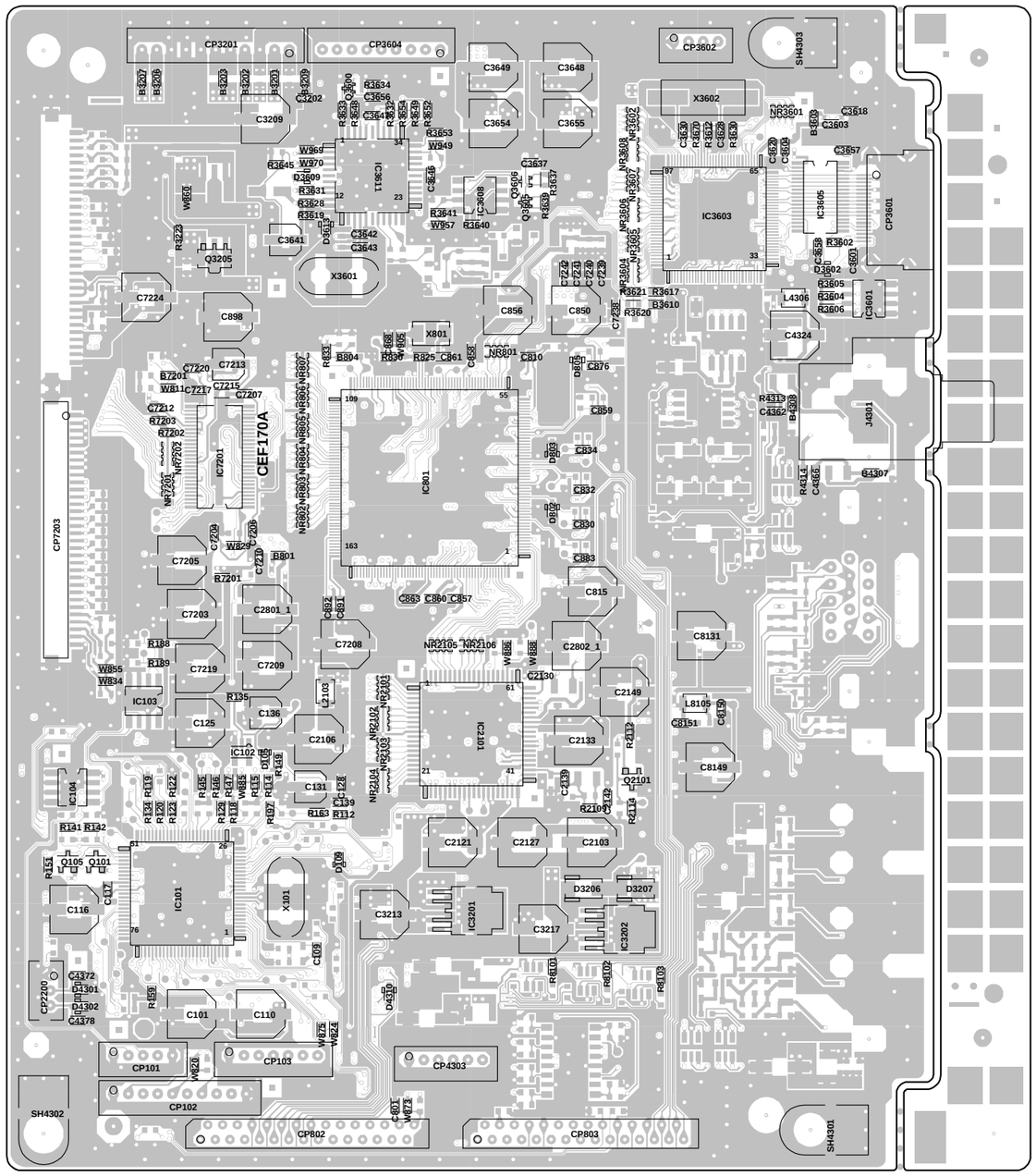


POWER BLOCK DIAGRAM



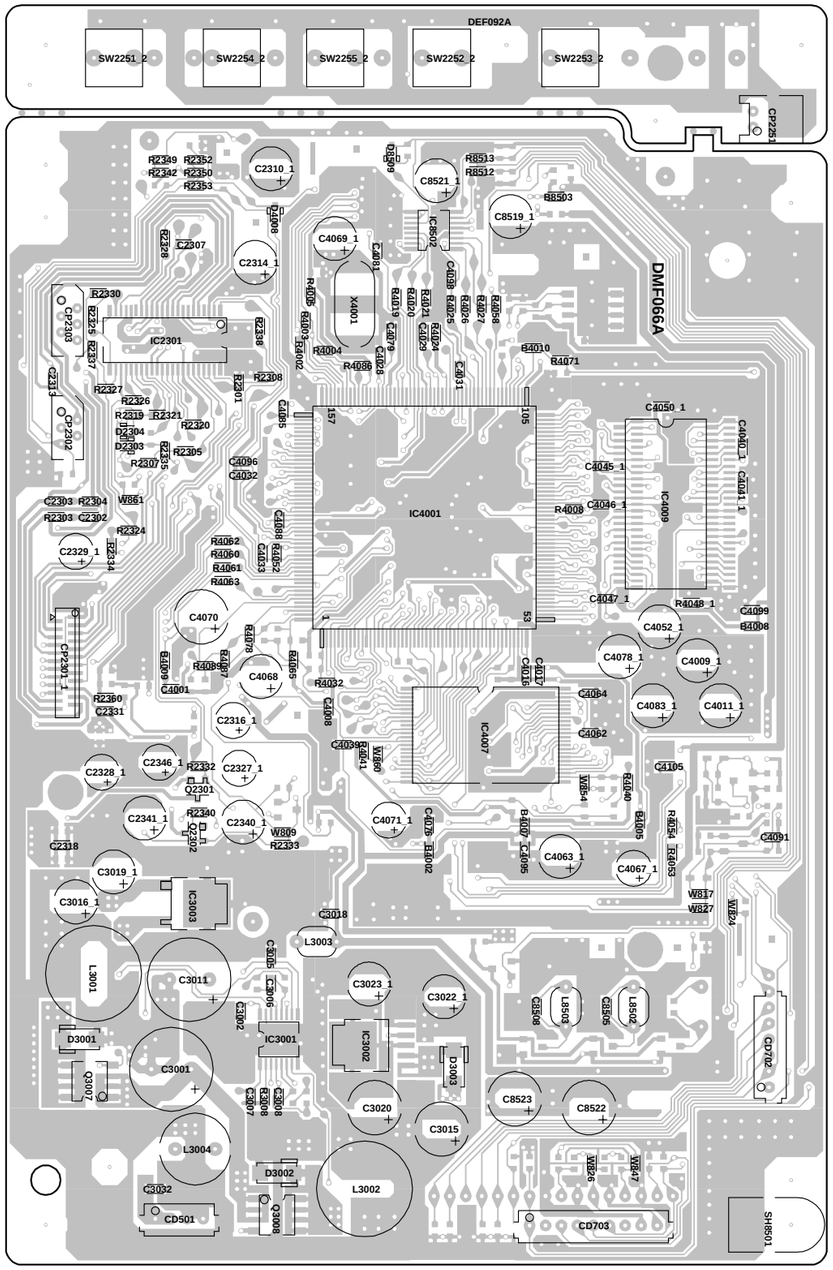
PRINTED CIRCUIT BOARDS

SCALER (TOP SIDE)



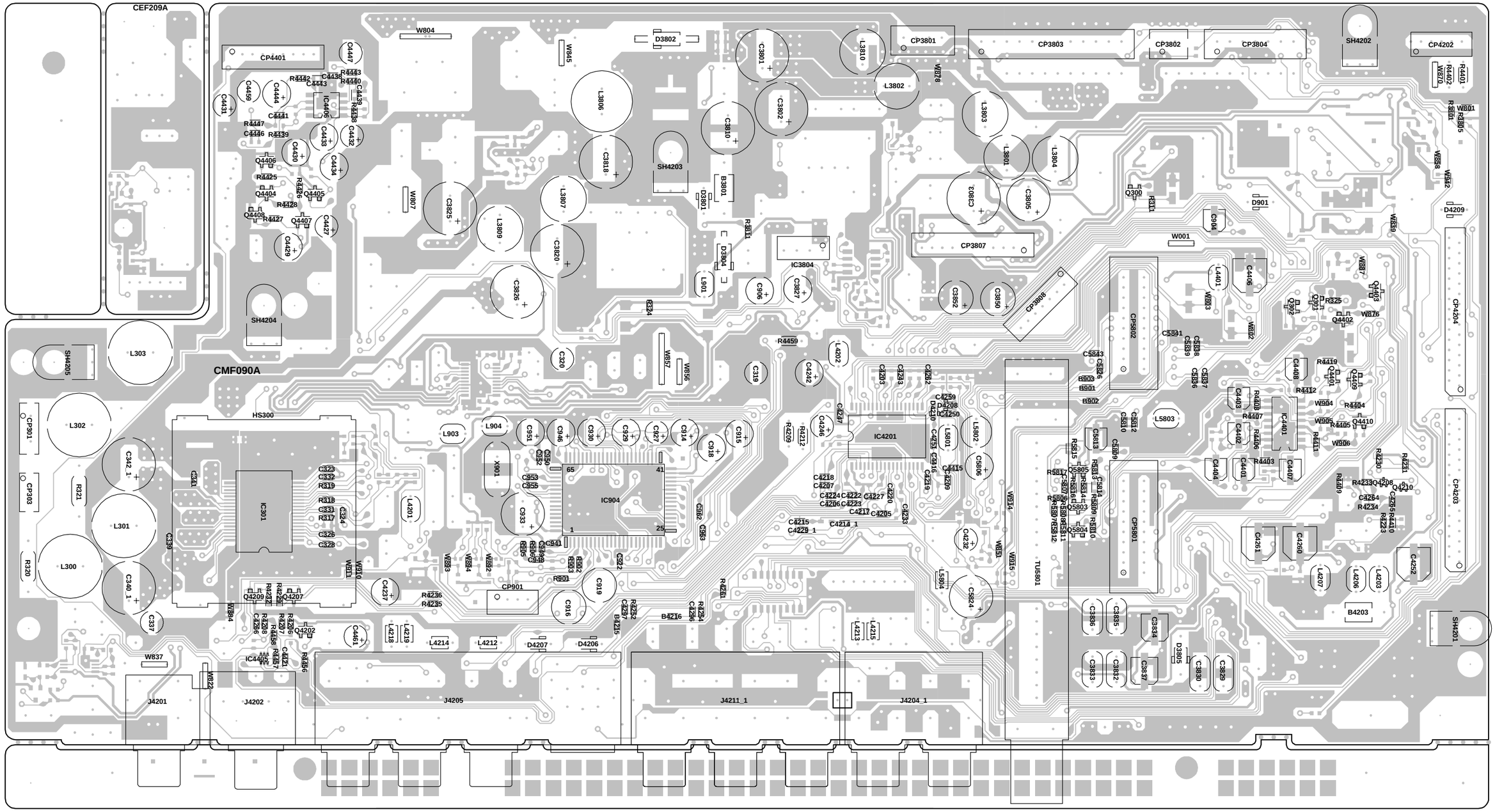
PRINTED CIRCUIT BOARDS

DVD MT/OPERATION 2 (TOP SIDE)



PRINTED CIRCUIT BOARDS

AV (TOP SIDE)


CEF209A
CMF090A
CP4401
W804
W845
D3802
C3801
L3810
CP3801
CP3803
CP3802
CP3804
SH4202
CP4202
W876
L3802
L3803
L3806
C3818
C3810
C3802
SH4203
L3801
L3804
C3803
C3805
W801
W838
W842
W807
C3825
L3809
L3807
C3820
B3801
D3801
R3811
Q300
R311
D901
C904
W001
D4209
CP3807
IC3804
D3804
L901
C906
C3827
C3852
C3850
CP3808
CP5802
W839
W888
Q4403
L4401
C4406
W883
Q901
R325
Q4402
W876
C5841
C5839
C5838
C5836
C5837
W802
C5843
C5826
B803
B901
B902
C4408
R4419
Q4401
Q4409
R4412
W904
R4404
W905
R4405
Q4410
W906
R4403
R4408
R4407
C4402
R4406
IC4401
R4411
C4404
C4401
C4407
R4409
R4230
R4231
R4233
Q4208
Q4210
C4264
R4234
R4223
C4235
R4410
C4261
C4260
C4252
L4207
L4206
L4203
B4203
SH4201
CP4203
C4204
SH4204
L303
SH4205
L302
CP301
HS300
L903
L904
C951
C946
C930
C929
C927
C914
C915
C918
R4209
R4212
C4246
C4247
IC4201
L5801
L5802
C5806
C4415
L5803
C5812
C5810
C5813
C5809
C4218
C4207
C4224
C4222
C4227
C4206
C4223
C4217
C4205
C4230
C4233
C4215
C4229_1
C4214_1
C4219
C4216
C4209
C4259
C4208
C4250
D4210
C4251
C4232
W834
W835
TU5801
L5804
C5824
CP5801
R5817
Q5807
R5816
R5806
Q5806
R5808
R5807
R5812
R5811
R5815
R5814
R5813
Q5805
Q5803
Q5804
R5810
R5809
W914
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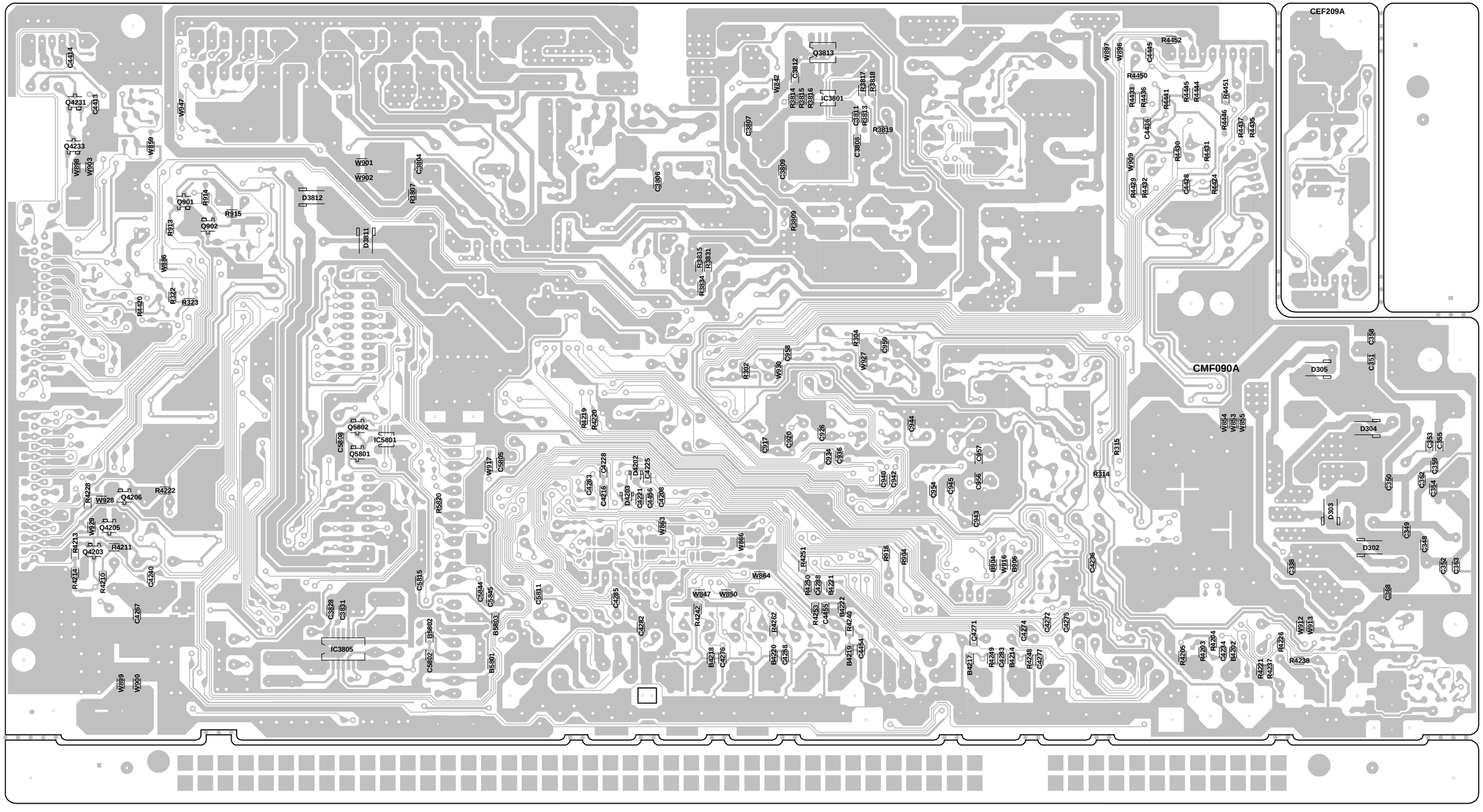
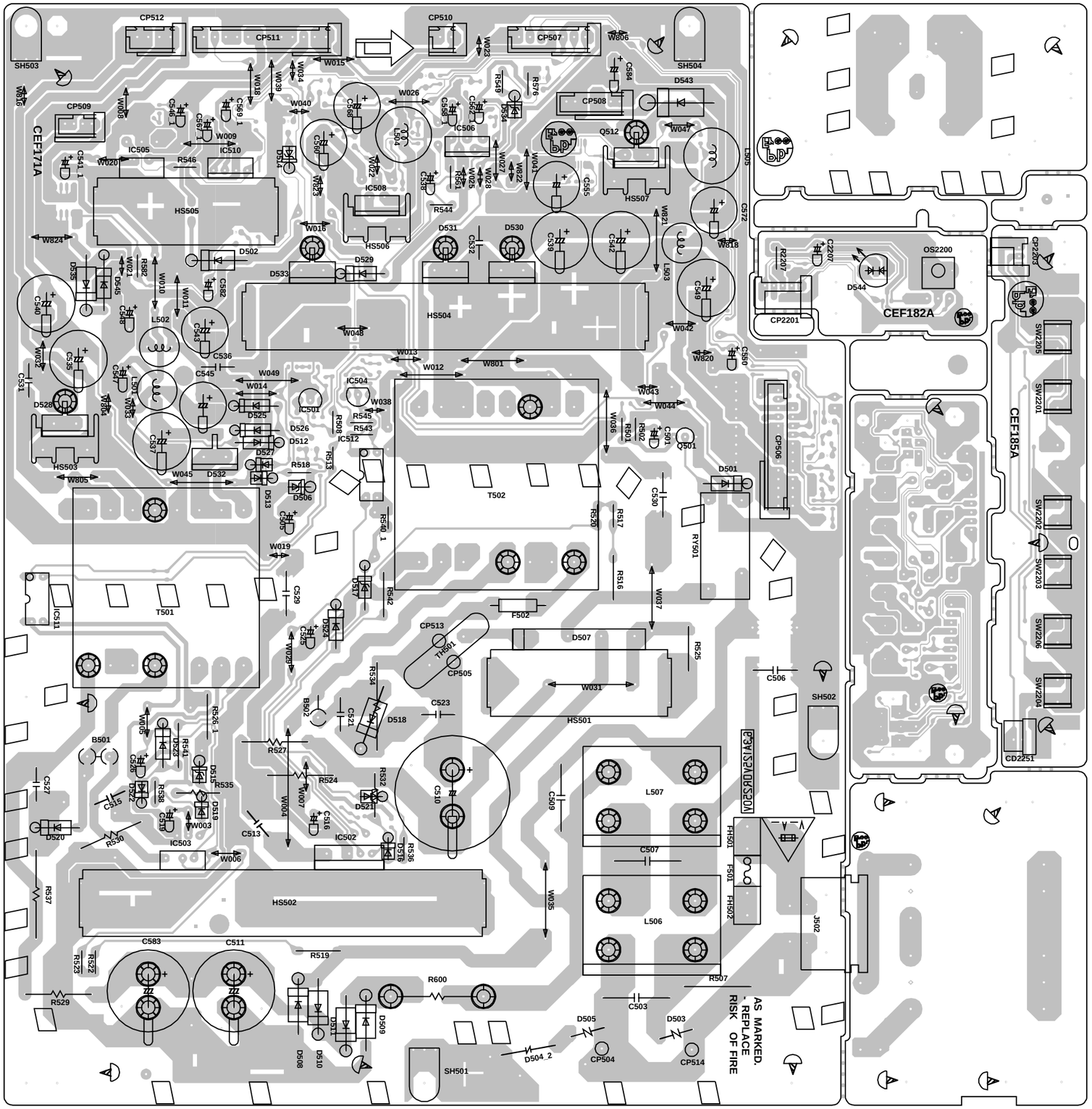
W937
W938
W939
W940

PRINTED CIRCUIT BOARDS

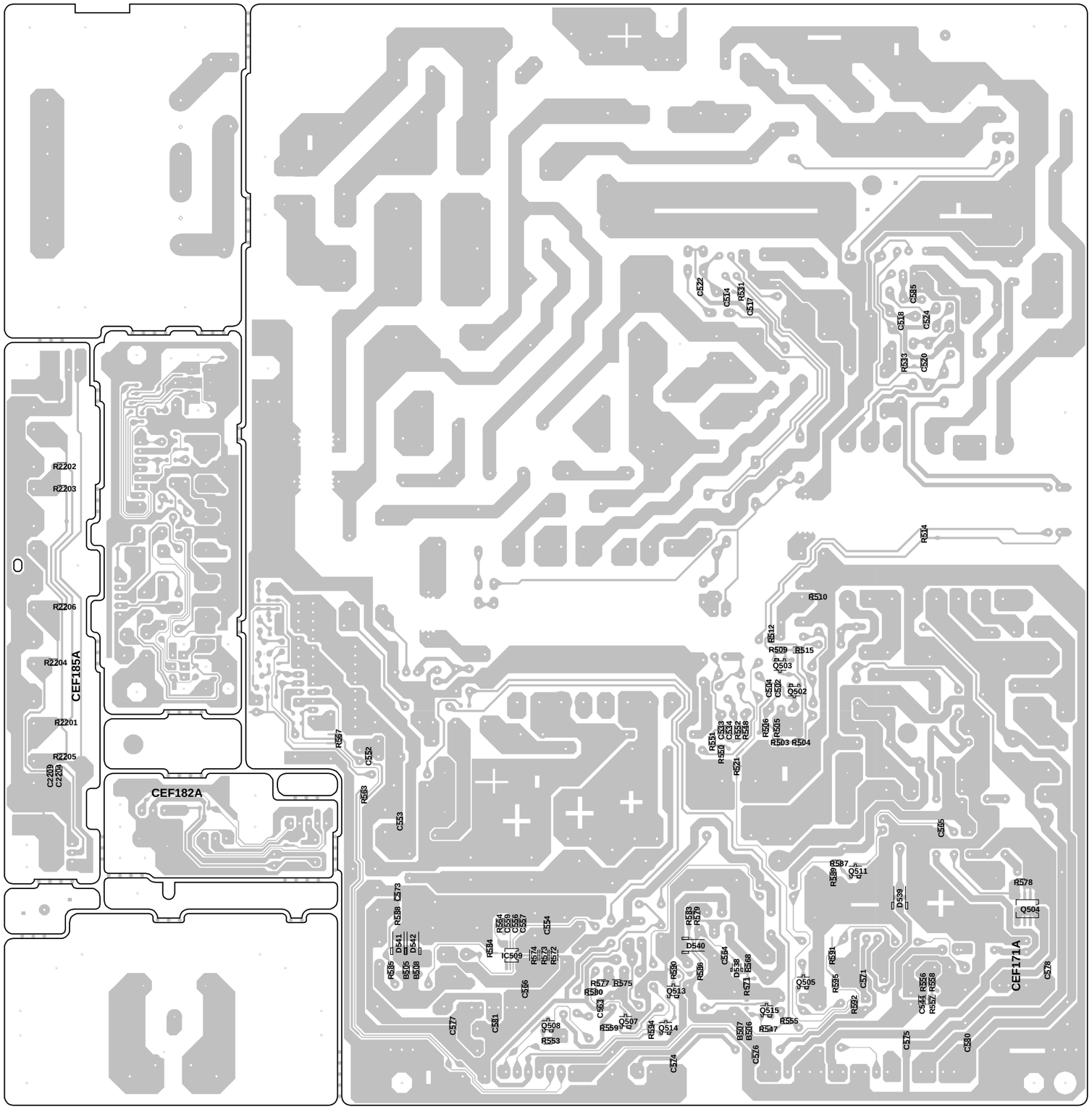
AV (BOTTOM SIDE)



PRINTED CIRCUIT BOARDS
POWER/OPERATION/REMOCON (INSERTED PARTS)
SOLDER SIDE

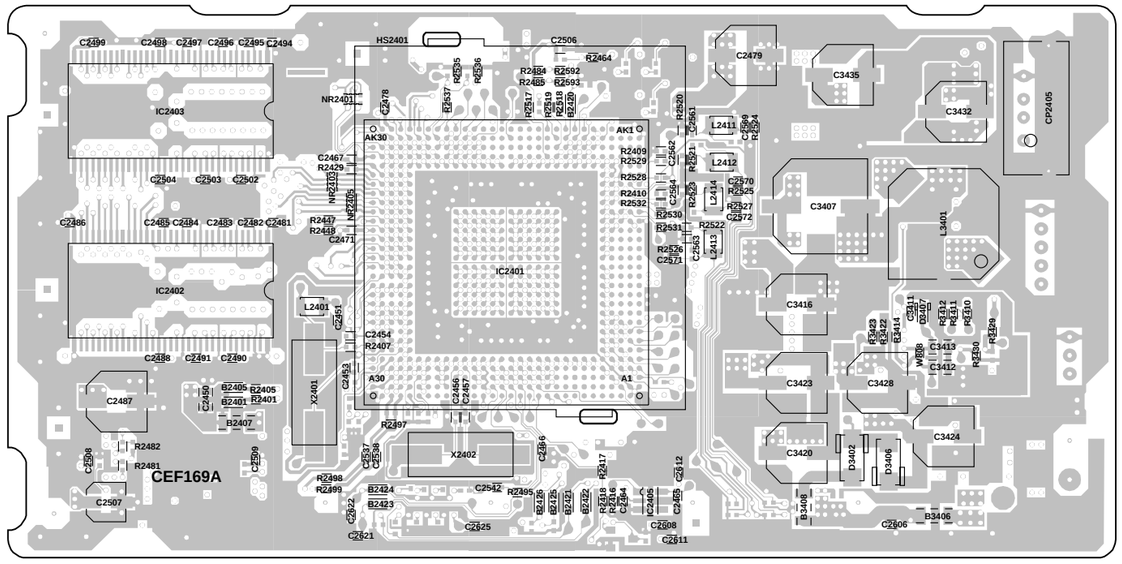


PRINTED CIRCUIT BOARDS
POWER/OPERATION (CHIP MOUNTED PARTS)
SOLDER SIDE

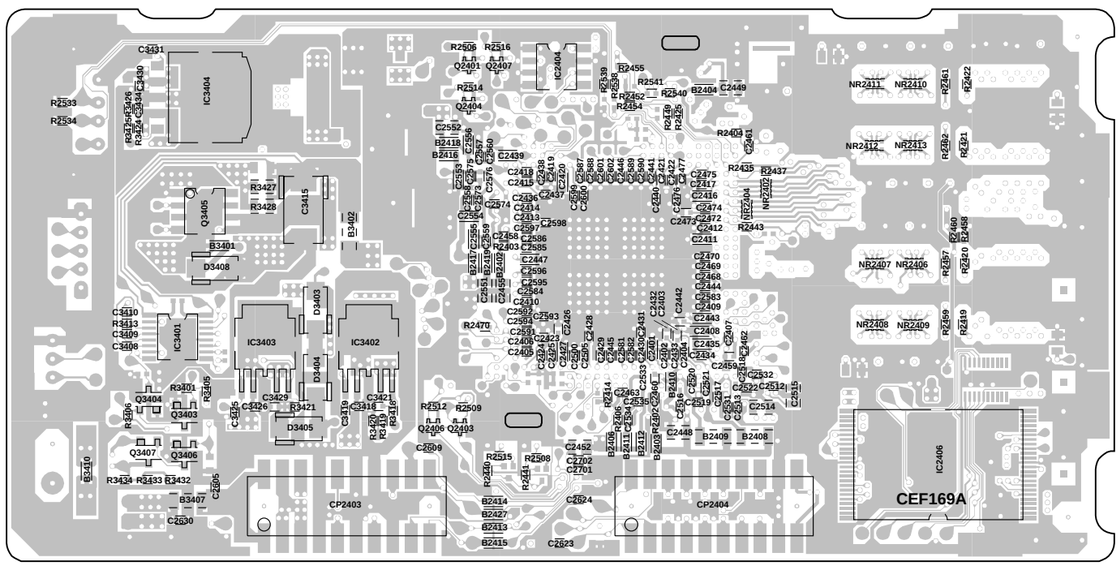


PRINTED CIRCUIT BOARDS

DIGITAL (TOP SIDE)



DIGITAL (BOTTOM SIDE)



AV SWITCH2 SCHEMATIC DIAGRAM
(AV PCB)

TR702
W5T29X7.5X19

FROM/TO POWER
AT+3.3V
AT+5V
P.CON+9V
GND
P.CON+5V

FROM/TO TUNER
DTUNER_Y
DTUNER_PB
DTUNER_PR

FROM/TO AV JACK
YUV1/YUV2_Y
YUV1/YUV2_PB
YUV1/YUV2_PR
YUV1_A_IN_L
YUV1_A_IN_R
S_SW_1
S_SW_2
S1_Y_IN
S1_C_IN
S2_Y_IN
S2_C_IN
AV1_IN
AV2_IN
AV1_A_IN_L
AV1_A_IN_R

FROM/TO TUNER/OUT JACK
REMOCON_IN
STANDBY_LED
DTUNER_H
DVD_Y
DVD_C
TUNER_VIDEO

FROM/TO OPERATION/REMOCON /FILTER/AC INLET
TR3001
W5T29X7.5X19

CP4202(CP2201)
A2001WV2-5P

5	P.ON LED
4	STANDBY LED
3	AT+5V
2	GND
1	REMOCON IN

COMPONENT1/2 YUV SW IC
IC4401 NJM2584AM(TE1)
IC4201 AN15853B-E1 AV SW IC

BUFFER Q4401 KTA1504S_Y_RTK
BUFFER Q4409 KTA1504S_Y_RTK
BUFFER Q4410 KTA1504S_Y_RTK
BUFFER Q4203 KTC3875S_Y_RTK
BUFFER Q4205 KTC3875S_Y_RTK
BUFFER Q4206 KTC3875S_Y_RTK
LEVEL SHIFT Q4208 KTK5132E
LEVEL SHIFT Q4210 KTK5132E
SW Q4231 KRA103SRTK
SW Q4233 KRC102SRTK

SIDE/DVD_Y W866 DVD_Y
SIDE/DVD_C W863 DVD_C

FROM/TO TUNER/OUT JACK
SW_YUV_PR
SW_YUV_PB
SW_YUV_Y

FROM/TO TUNER
DTUNER_RESET
DTUNER_TX
AUDIO_MUTE_L
DTUNER_POWER
DTUNER_SD_H
DTUNER_RX
TUNER_VIDEO

FROM/TO STEREO
SCL
SDA
SW_AUDIO_R[JACK]
SW_AUDIO_L[JACK]
STEREO_RESET
SW_AUDIO_L[PC]
SW_AUDIO_R[PC]

FROM/TO SCALER
CP4203(CP803)
00_6232_029_006_800+

NC	DVD/AV3_SW	29
DTUNER_H	DTUNER_H	28
AUDIO_MUTE_L	DTV_MUTE_L	27
NC	———	26
DTUNER_RX	DTUNER_RX	25
	GND	24
DTUNER_TX	DTUNER_TX	23
	GND	22
DTUNER_RESET	DTUNER_RESET_L	21
	GND	20
SW_AUDIO_R[PC]	SW_AUDIO_R(PC)	19
	GND	18
SW_AUDIO_L[PC]	SW_AUDIO_L(PC)	17
NC	———	16
STEREO_RESET	STEREO_RESET	15
NC	———	14
NC	SCART_AUDIO_SW	13
	SDA1	12
	SCL1	11
	GND	10
DTUNER_POWER	DTUNER_POWER	9
	GND	8
DTUNER_SD_H	DTUNER_SD_H	7
	GND	6
	SWITCH_CVBS	5
	GND	4
	SWITCH_VIDEO_Y	3
	GND	2
	SWITCH_VIDEO_C	1

CD4203
2H0T1401

CAUTION: DIGITAL TRANSISTOR

CAUTION: DIGITAL TRANSISTOR

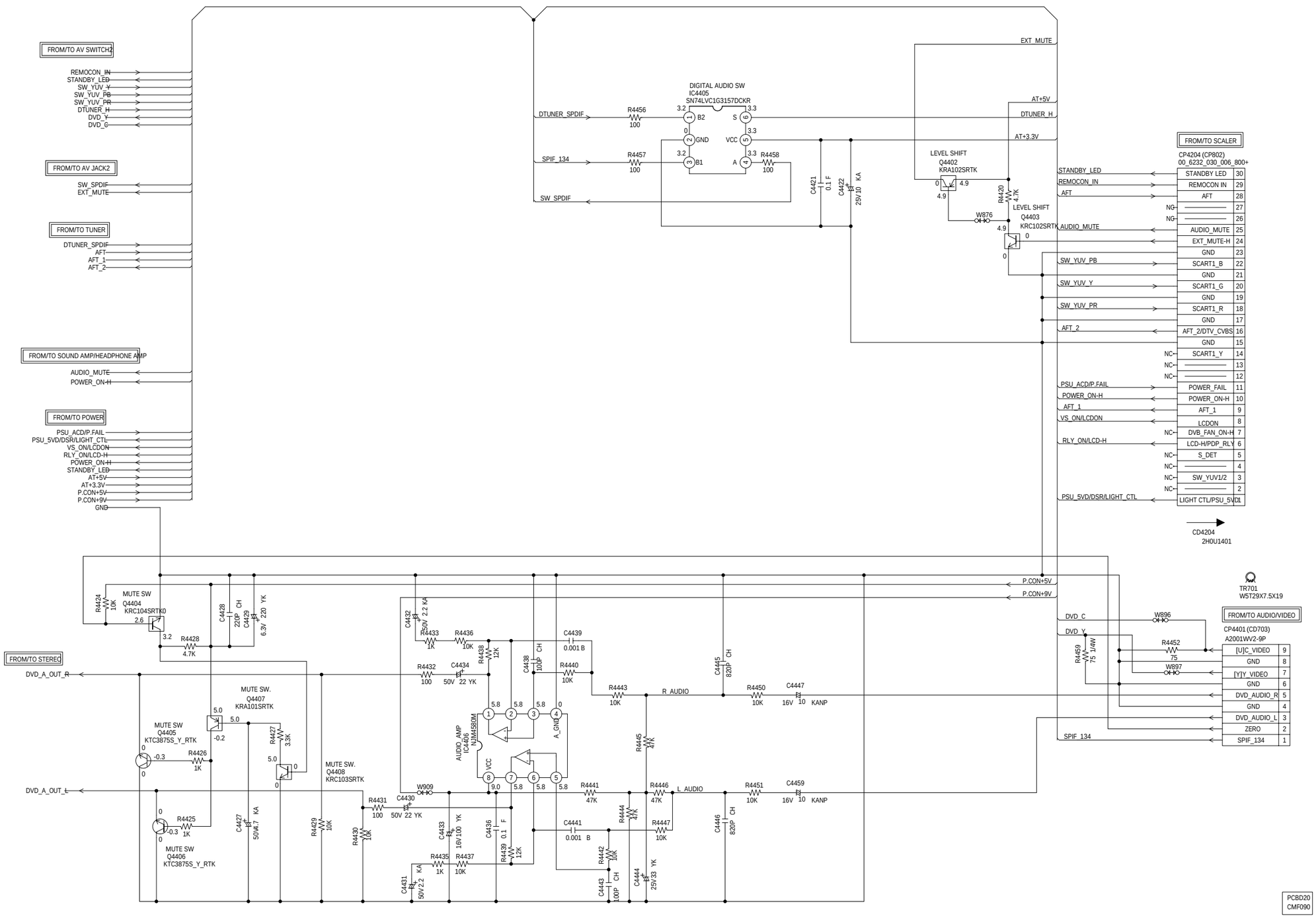
NOTE: THIS SCHEMATIC DIAGRAM IS THE LATEST AT THE TIME OF PRINTING AND SUBJECT TO CHANGE WITHOUT NOTICE。

NOTE:THE DC VOLTAGE AT EACH PART WAS MEASURED WITH THE DIGITAL TESTER WHEN THE COLOR BROADCAST WAS RECEIVED IN GOOD CONDITION AND PICTURE IS NORMAL.

PCBD20
CMF090

TUNER/OUT JACK SCHEMATIC DIAGRAM

(AV PCB)



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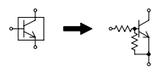
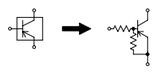
CAUTION: DIGITAL TRANSISTOR

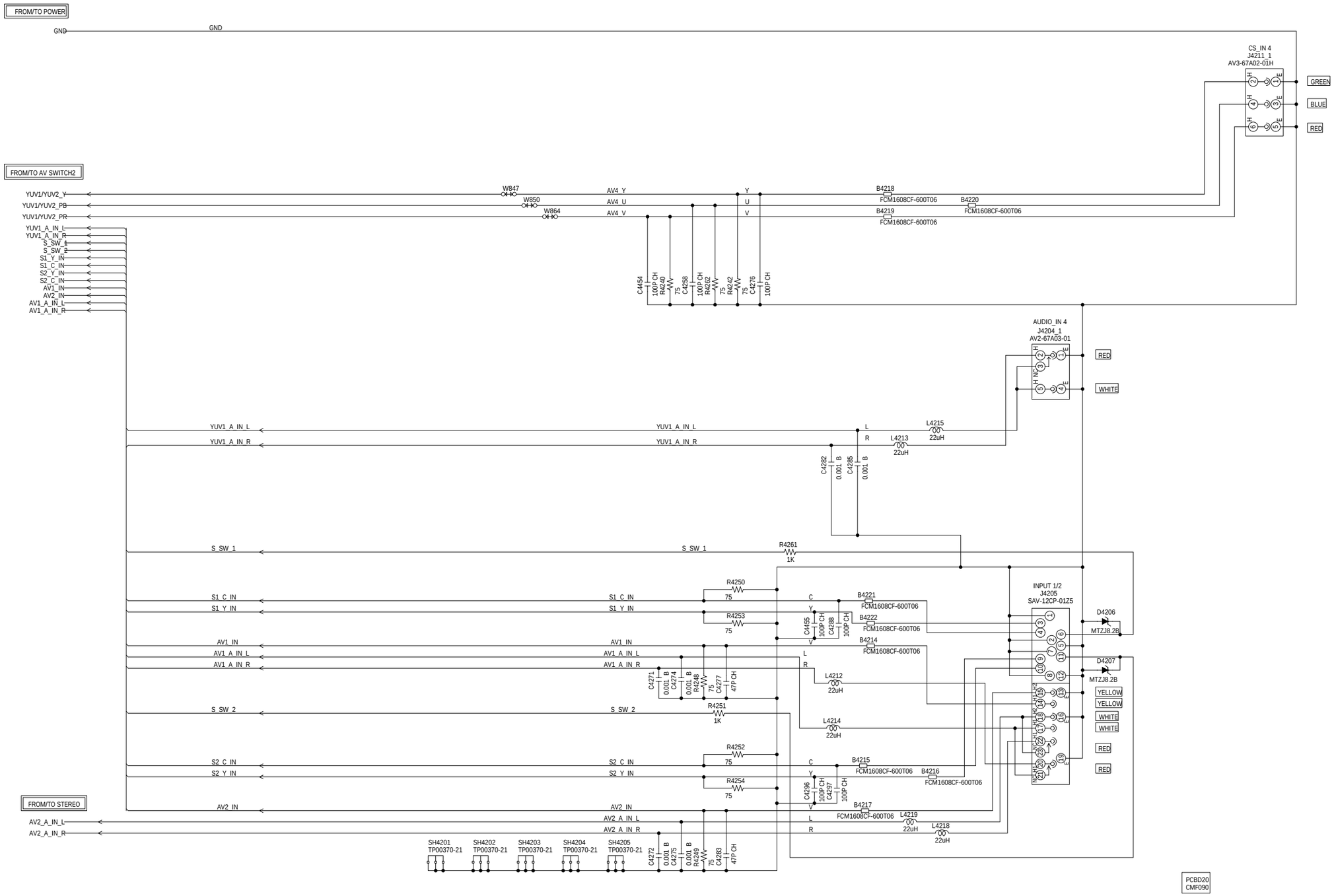


CAUTION: DIGITAL TRANSISTOR



AV JACK SCHEMATIC DIAGRAM

(AV PCB)



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STEREO SCHEMATIC DIAGRAM

(AV PCB)

FROM/TO POWER

AT+5V

P.CON+5V

GND

P.CON+8V

W839

R914 10K

R915 10K

C906 10V220 YK

R913 1K

BUFFER Q901 KTC3875S_Y_RTK

BUFFER Q902 KTC3875S_Y_RTK

L901 10uH 0305

B901 BLM18PG121SN1D

B902 FCM1608CF-600T06

B903 BLM18PG121SN1D

L903 10uH 0305

R906 100

R905 100

C922 0.1 B

D901 MTZJ5.6B

C904 16V22 V-S

C923 6.3V 1000 YK

C941 0.0015 B

C943 470P CH

C945 220P CH

C948 22P CH

C949 22P CH

R901 33

R902 33

R903 33

L904 10uH 0305

C957 5P CH

C956 10P CH

X901 18.432MHz 100CT01804

C955 56P CH

C953 56P CH

C954 56P CH

C952 470P CH

C950 0.0015 B

C951 50V10 YK

W857

W856

C959 0.0022 B

C958 0.0022 B

W927

W930

FROM/TO TUNER

I2SSD0_OUTA

I2SWS_OUTA

I2SSCLK_OUTA

I2SSD0_IN

I2SWS_IN

I2SSCLK_IN

FROM/TO HDMI MICON2

(CP3602) CP901 A2001WV2-4P

W892 W893 W916 B904 FCM1608KF-102T02 HDMI_I2SSCK

W894 B906 FCM1608KF-102T02 HDMI_I2SWS

HDMI_I2SSDO

GND

HDMI_I2SSCK/MCKL	4
HDMI_I2SSDO	3
HDMI_I2SWS	2
GND	1

CD901 CU246601

FROM/TO SOUND AMP/HEADPHONE AMP

SP_AUDIO_OUT_L

SP_AUDIO_OUT_R

FROM/TO AV JACK2

AUDIO_JACK_OUT_R

AUDIO_JACK_OUT_L

C916 16V22 KANP

C919 16V22 KANP

R904 100

R916 100

C915 50V10 YK

C914 50V10 YK

C917 470P CH

C920 0.0015 B

C918 50V10 YK

C926 0.1 B

C927 3.3 50V KA

C929 50V 22 YK

C930 50V 22 YK

C962 0.33 B

C963 0.33 B

C934 0.33 B

C936 0.33 B

C940 0.33 B

C942 0.33 B

C944 0.1 B

C946 50V10 YK

FROM/TO AV SWITCH2

STEREO_RESET

SCL

SDA

SW_AUDIO_L[PC]

SW_AUDIO_R[PC]

SW_AUDIO_L[JACK]

SW_AUDIO_R[JACK]

FROM/TO AV JACK

AV2_A_IN_L

AV2_A_IN_R

FROM/TO TUNER

SIF

FROM/TO TUNER/OUT JACK

DVD_A_OUT_R

DVD_A_OUT_L

PCBD20 CMF090

STEREO IC904 MSP4440G-QA-C13-100

25 NC

26 VREF2

80 STANDBYQ

79 ADR_SEL

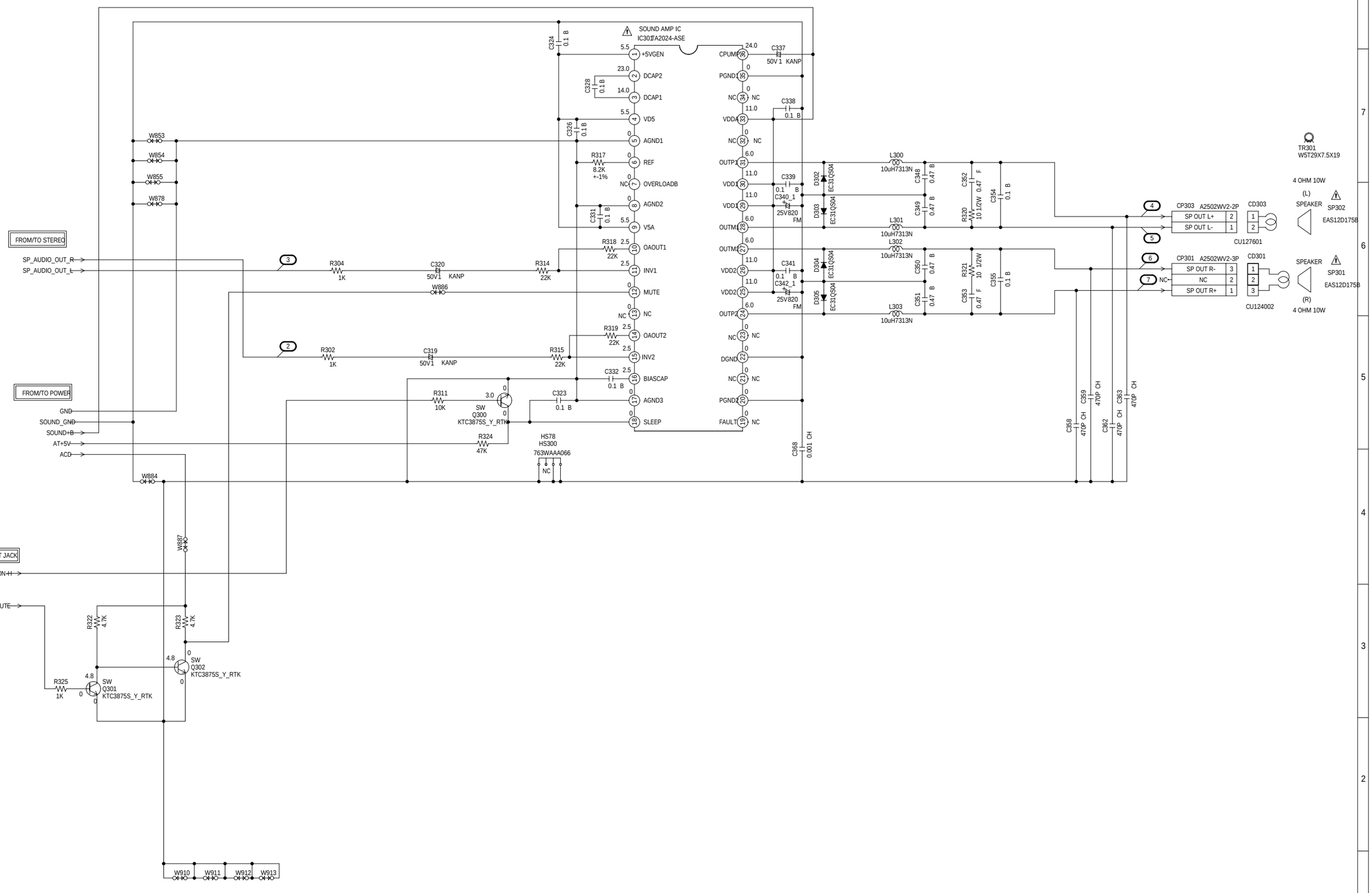
40 CAPL_M

65 AVSUP

| | | |

SOUND AMP/HEADPHONE AMP SCHEMATIC DIAGRAM

(AV PCB)



CAUTION SINCE THESE PARTS MARKED BY ⚠ ARE CRITICAL FOR SAFETY,USE ONES DESCRIBED IN PARTS LIST ONLY 。

ATTENTION:LES PIECES REPAREES PAR UN ⚠ ETANT DANGEREUSES AN POINT DE VUE SECURITE N'UTILISER QUE CELLS DECRITES DANS LA NOMENCLATURE DES PIECES。

NOTE: THIS SCHEMATIC DIAGRAM IS THE LATEST AT THE TIME OF PRINTING AND SUBJECT TO CHANGE WITHOUT NOTICE 。

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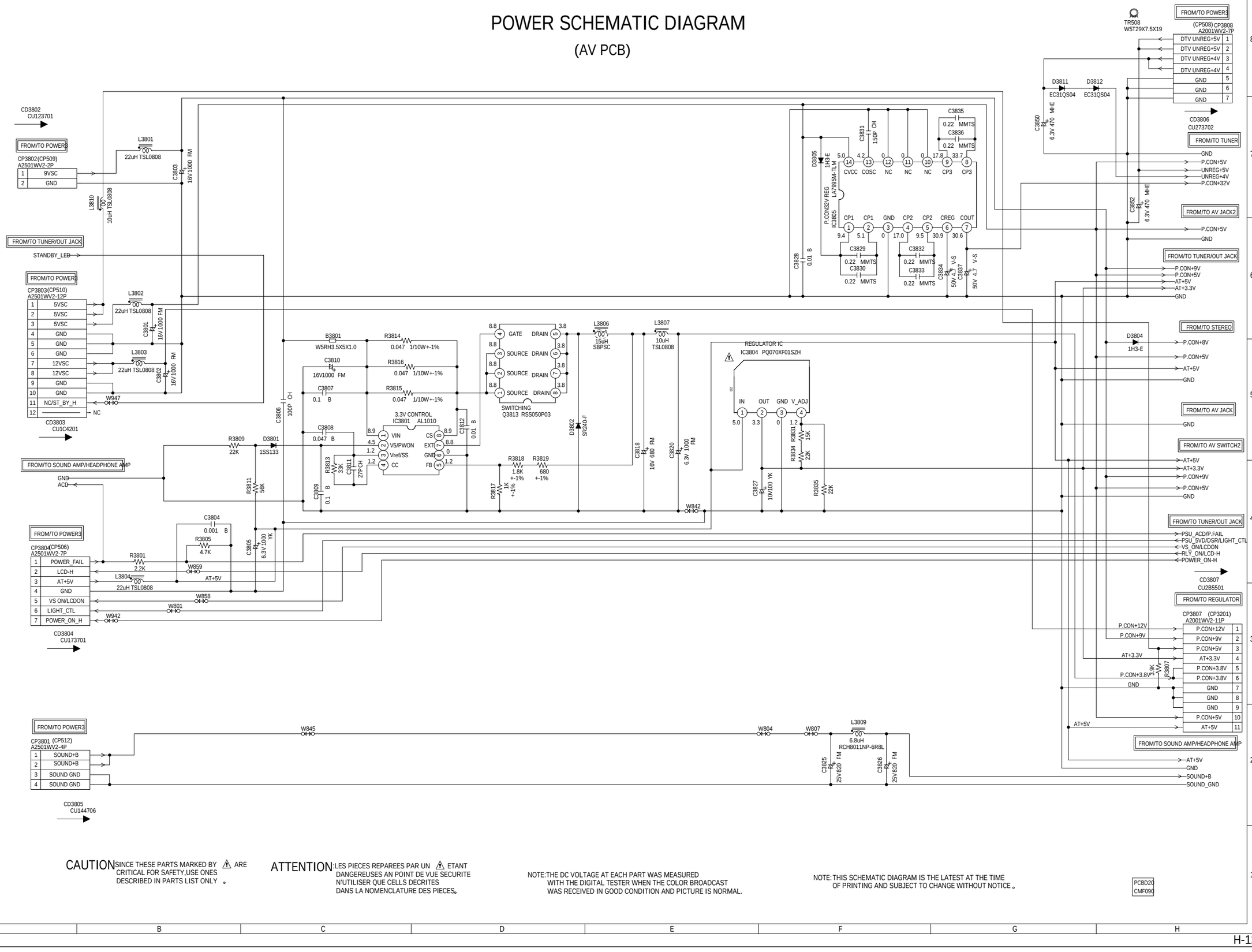
PCBD20
CMF090

POWER SCHEMATIC DIAGRAM

(AV PCB)



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ATTENTION :LES PIECES REPAREES PAR UN ⚠ ETANT DANGEREUSES AN POINT DE VUE SECURITE N'UTILISER QUE CELLS DECRITES DANS LA NOMENCLATURE DES PIECES。

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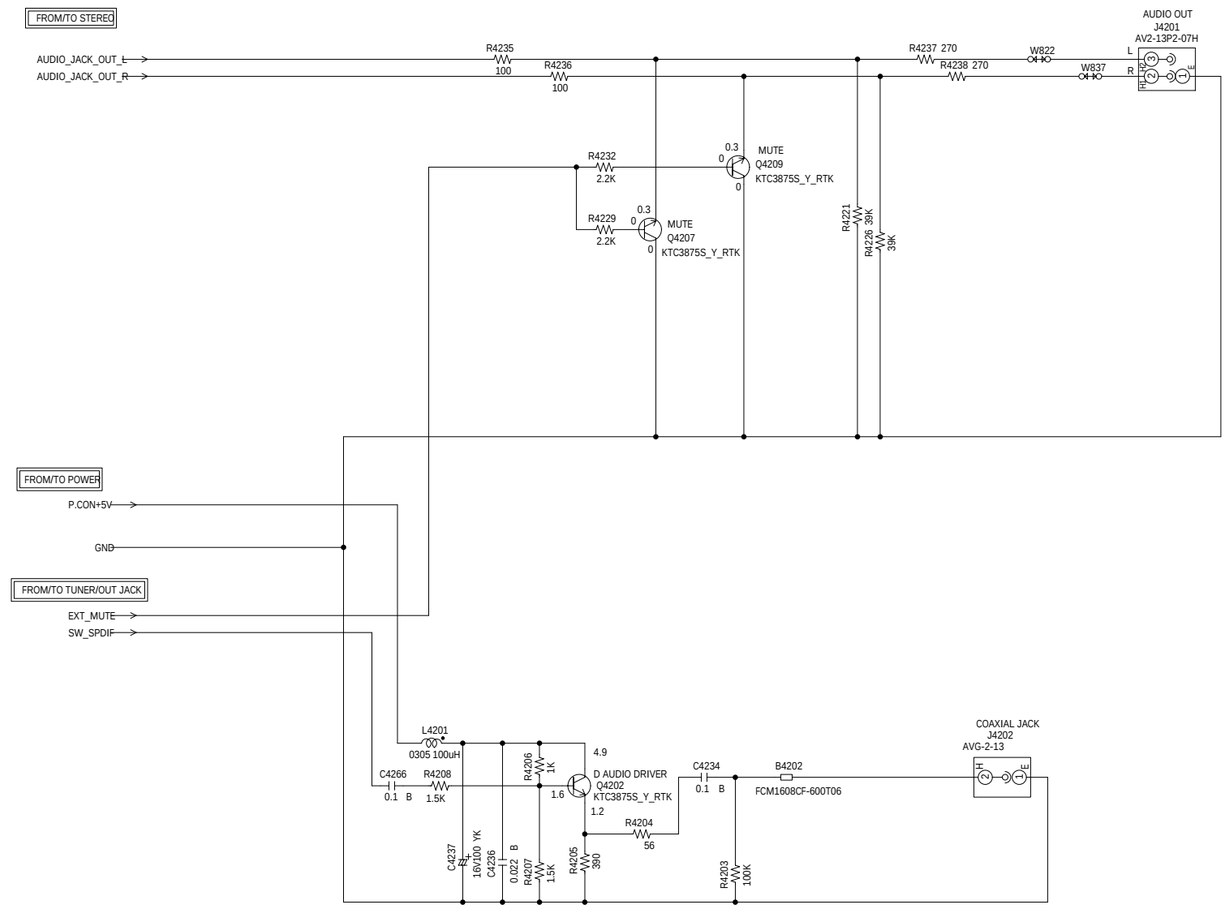
PCBD20
CMF090

AV JACK2 SCHEMATIC DIAGRAM

(AV PCB)



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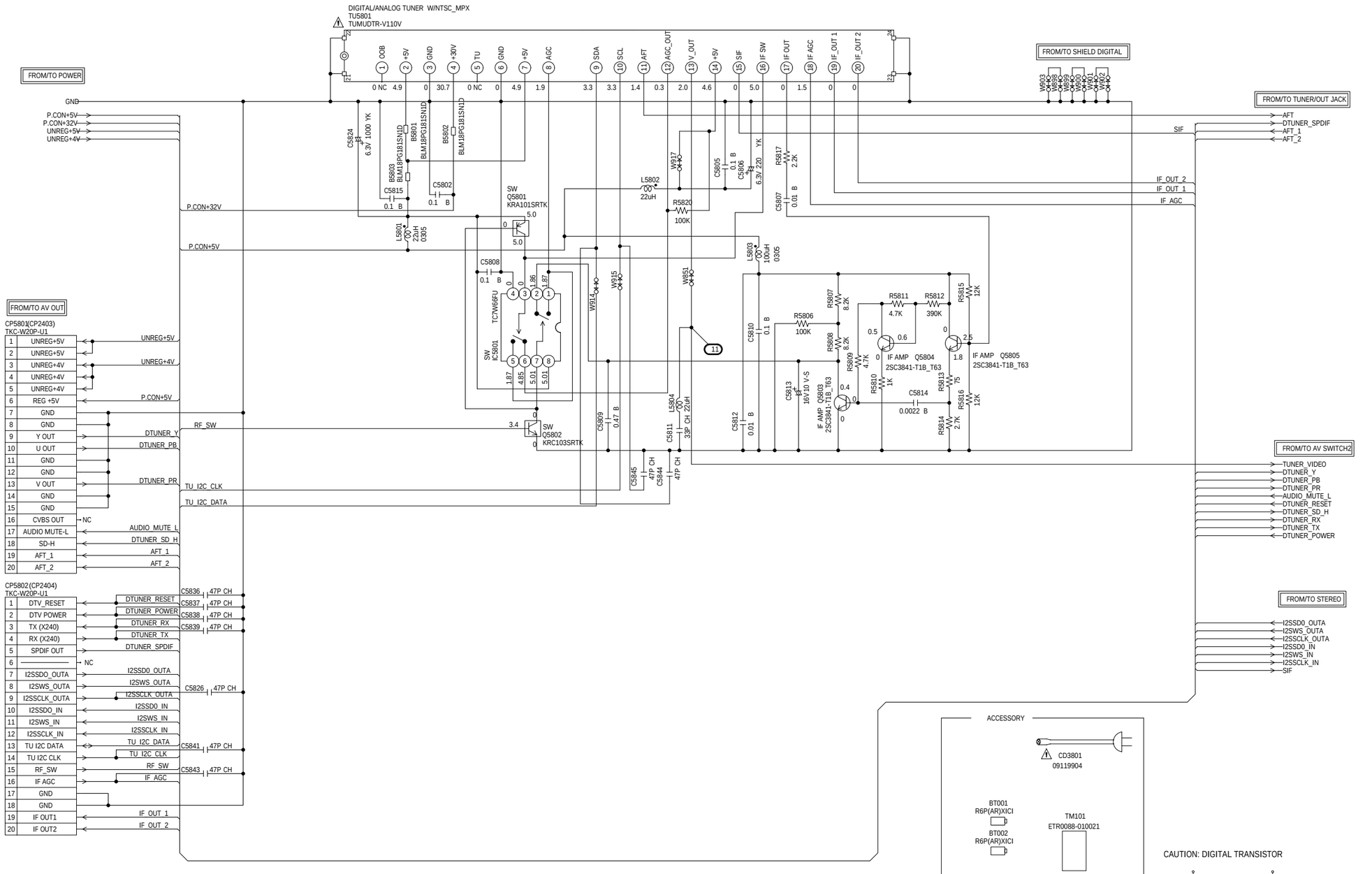
NOTE: THE DC VOLTAGE AT EACH PART WAS MEASURED WITH THE DIGITAL TESTER WHEN THE COLOR BROADCAST WAS RECEIVED IN GOOD CONDITION AND PICTURE IS NORMAL.

PCBD20
CMF090

TUNER SCHEMATIC DIAGRAM

(AV PCB)



ATTENTION: LES PIECES REPAREES PAR UN ⚠ ETANT DANGEREUSES AN POINT DE VUE SECURITE N'UTILISER QUE CELLS DECRITES DANS LA NOMENCLATURE DES PIECES。

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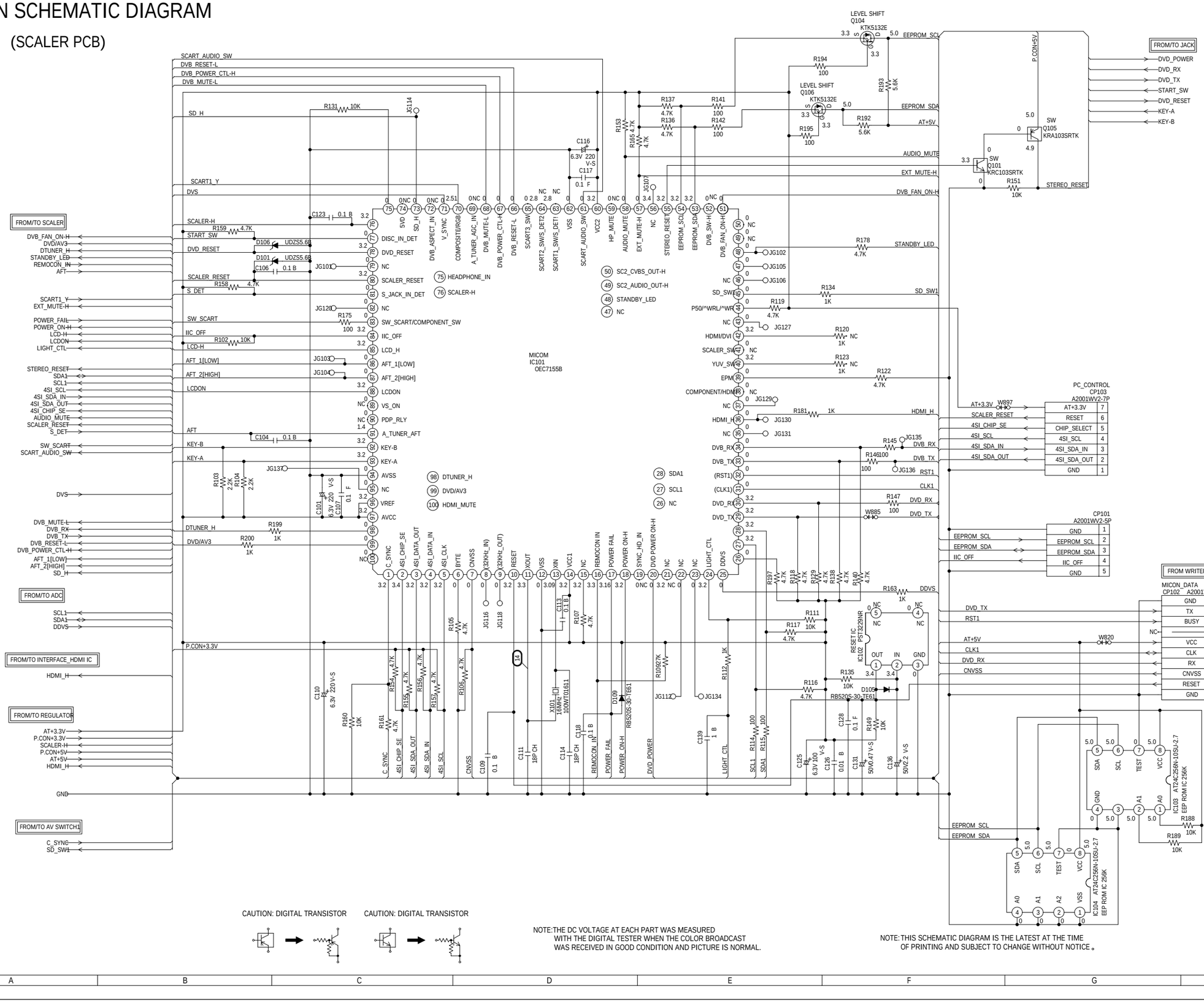
MICON SCHEMATIC DIAGRAM

(SCALER PCB)


FROM/TO SCALER
FROM/TO ADC
FROM/TO INTERFACE_HDMI IC
FROM/TO REGULATOR
FROM/TO AV SWITCH1
FROM/TO JACK
FROM WRITER
MICOM IC101 OEC7155B
LEVEL SHIFT Q104 KTK5132E
LEVEL SHIFT Q106 KTK5132E
SW Q105 KRA103SRTK
SW Q101 KRC103SRTK
RESET IC IC102 PST3229NR
PC_CONTROL CP103 A2001WV2-7P
CP101 A2001WV2-5P
MICON_DATA CP102 A2001WV2-10P
IC103 AT24C256N-10SU-2.7 EEP ROM IC 256K
IC104 AT24C256N-10SU-2.7 EEP ROM IC 256K
CAUTION: DIGITAL TRANSISTOR
CAUTION: DIGITAL TRANSISTOR
NOTE:THE DC VOLTAGE AT EACH PART WAS MEASURED WITH THE DIGITAL TESTER WHEN THE COLOR BROADCAST WAS RECEIVED IN GOOD CONDITION AND PICTURE IS NORMAL.
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PCBDSC CEF170

SCALER SCHEMATIC DIAGRAM

(SCALER PCB)

FROM/TO TUNER/OUT JACK

CP802(CP4204)
00_6232_030_006_800+

1	STANDBY LED	STANDBY_LED
2	REMOCON IN	REMOCON_IN
3	AFT	AFT
4	———	NC
5	———	NC
6	AUDIO_MUTE	AUDIO_MUTE
7	EXT_MUTE-H	EXT_MUTE-H
8	GND	
9	SCART1_B	SW2_B/CB
10	GND	
11	SCART1_G	SW2_G/Y
12	GND	
13	SCART1_R	SW2_R/CR
14	GND	
15	AFT_2/DTV_CVBS	AFT_2[HIGH]
16	GND	GND
17	SCART1_Y	SCART1_Y
18	———	NC
19	———	NC
20	POWER_FAIL	POWER_FAIL
21	POWER_ON-H	POWER_ON-H
22	AFT_1	AFT_1[LOW]
23	LCDON	LCDON
24	DVB_FAN_ON-H	DVB_FAN_ON-H
25	LCD-H/PDP_RLY	LCD-H
26	S_DET	S_DET
27	———	NC
28	SW_YUV1/2	SW_SCART
29	———	NC
30	LIGHT CTL/PSU_5VD	LIGHT_CTL

FROM/TO AV SWITCH2

CP803(CP4203)
00_6232_029_006_800+

1	DVD/AV3_SW	DVD/AV3
2	DTUNER_H	DTUNER_H
3	DTV_MUTE_L	DVB_MUTE-L
4	———	NC
5	DTUNER_RX	DVB_RX
6	GND	
7	DTUNER_TX	DVB_TX
8	GND	
9	DTUNER_RESET_L	DVB_RESET-L
10	GND	
11	SW_AUDIO_R(PC)	SW_AUDIO_R[PC]
12	GND	
13	SW_AUDIO_L(PC	SW_AUDIO_L[PC]
14	———	NC
15	STEREO_RESET	STEREO_RESET
16	———	NC
17	SCART_AUDIO_SW	SCART_AUDIO_SW
18	SDA1	SDA1
19	SCL1	SCL1
20	GND	
21	DTUNER_POWER	DVB_POWER_CTL-H
22	GND	
23	DTUNER_SD_H	SD_H
24	GND	
25	SWITCH_CVBS	W931 W802
26	GND	
27	SWITCH_VIDEO_Y	W930 W809
28	GND	
29	SWITCH_VIDEO_C	W929 W801

FROM/TO AV SWITCH1

SW_G/SW_Y
SW_R/SW_CR
SW_B/SW_CB
SW2_R/CR
SW2_G/Y
SW2_B/CB
SW_CVBS
SW_VIDEO_Y

W803 W883

SCALER

IC801

R8J66607A72FP

1	DPR3	2	DPR2
3	DPR1	4	DPR0
5	DPB7	6	DPB6
7	DPB5	8	DPB4
9	DPB3	10	DPB2
11	DPB1	12	DPB0
13	DPG7	14	DPG6
15	DPG5	16	DPG4
17	DPG3	18	DPG2
19	DPG1	20	DPG0
21	DPR7	22	DPR6
23	DPR5	24	DPR4
25	DPR3	26	DPR2
27	DPR1	28	DPR0
29	DDHS	30	DDVS
31	DDCK	32	DVDD33
33	DGND	34	DVDD15
35	QBR4	36	QBR3
37	QBR2	38	QBR1
39	QBR0	40	DGND
41	DVDD33	42	QGR7
43	QGR6	44	QGR5
45	QGR4	46	QGR3
47	QGR2	48	DVDD33
49	DGND	50	DVDD15
51	QGR1	52	QGR0
53	QCLKR	54	QRL7
55	QRL6	56	QRL5
57	QRL4	58	QRL3
59	DVDD33	60	DGND
61	DVDD15	62	QRL2
63	QRL1	64	QRL0
65	QBL7	66	QBL6
67	QBL5	68	QBL4
69	QBL3	70	QBL2
71	DVDD33	72	DGND
73	DVDD15	74	QBL1
75	QBL0	76	QGL7
77	QGL6	78	QGL5
79	DGND	80	DVDD33
81	QGL4	82	QGL3
83	QGL2	84	QGL1
85	TEST1	86	LPF1
87	TEST0	88	DVDD33
89	DVDD33	90	DVDD15
91	DGND	92	DVDD33
93	DVDD33	94	DGND
95	DVDD15	96	QRVHB
97	QRVHC	98	QRVHD
99	QRVHE	100	DVDD33
101	DGND	102	DVDDSD
103	QRVHF	104	QRVVA
105	QRVVB	106	QCLKL
107	DVDD33	108	DGND
109	DVDD15	110	QRH7
111	QRH6	112	QRH5
113	QRH4	114	QRH3
115	QRH2	116	QRH1
117	QRH0	118	DVDD33
119	DGND	120	DVDDSD
121	QRH9	122	QRH8
123	QRH7	124	QRH6
125	QRH5	126	QRH4
127	QRH3	128	QRH2
129	QRH1	130	QRH0
131	DVDD33	132	DGND
133	DVDD15	134	QBR7
135	QBR6	136	QBR5
137	DVDD33	138	DGND
139	DVDD15	140	QBR4
141	QBR3	142	QBR2
143	QBR1	144	QBR0
145	DGND	146	DVDD33
147	DVDD15	148	QGR7
149	QGR6	150	QGR5
151	QGR4	152	QGR3
153	QGR2	154	DVDD33
155	DGND	156	DVDD15
157	QGR1	158	QGR0
159	QCLKR	160	QRL7
161	QRL6	162	QRL5
163	QRL4	164	QRL3
165	DVDD33	166	DGND
167	DVDD15	168	QRL2
169	QRL1	170	QRL0
171	QBL7	172	QBL6
173	QBL5	174	QBL4
175	QBL3	176	QBL2
177	DVDD33	178	DGND
179	DVDD15	180	QBL1
181	QBL0	182	QGL7
183	QGL6	184	QGL5
185	DGND	186	DVDD33
187	QGL4	188	QGL3
189	QGL2	190	QGL1
191	TEST1	192	LPF1
193	TEST0	194	DVDD33
195	DVDD33	196	DVDD15
197	DGND	198	DVDD33
199	DVDD33	200	DGND
201	DVDD15	202	QRVHB
203	QRVHC	204	QRVHD
205	QRVHE	206	DVDD33
207	DGND	208	DVDDSD
209	QRVHF	210	QRVVA
211	QRVVB	212	QCLKL
213	DVDD33	214	PXD23
215	DVDD15	216	DGND
217	PXD22	218	PXD21
219	PXD20	220	PXD19
221	PXD18	222	PXD17
223	PXD16	224	PXD15
225	DVDDSDO	226	PXD14
227	PXD13	228	PXD12
229	PXD11	230	PXD10
231	PXD07	232	PXD06
233	DVDD33	234	DGND
235	DVDD15	236	PXD05
237	PXD04	238	PXD03
239	PXD02	240	PXD01
241	PXD00	242	PXCLK
243	DVDDSDO	244	DGNDO
245	QBLCD	246	QBLCC
247	QBLCB	248	QBLCA
249	TSTCLK	250	QRR7
251	QRR6	252	QRR5
253	QRR4	254	DVDD33
255	DGND	256	DVDD15
257	QRR3	258	QRR2
259	QRR1	260	DVDD33
261	DGND	262	DVDDSDO
263	QRR0	264	QBR7
265	QBR6	266	QBR5

C2802_1 4V 470 V-S
C2801_1 V-S 4V 470
C822 0.1 B
C824 0.1 B
SW_CVBS
C883 0.1 B
C823 0.1 B
C814 0.1 B
C815 6.3V 220 V-S
C812 0.1 B
C816 0.1 B
C826 0.1 B
C818 0.1 B
C817 0.1 B
C819 0.1 B
C820 0.1 B
C827 0.1 B
C850 6.3V 220 V-S
C856 6.3V 220 V-S
C861 7PCH
C868 7PCH
X801 54MHz
W905
R825 1M
R830 470
R831 10K
R806 10K
R807 10K
R805 10K
R804 10K
R833 47
R834 10K
R835 10K
R836 1K
R837 0
R838 0
R839 0
R840 0
R841 0
R842 0
R843 0
R844 47
R845 47
R846 47
C887 0.01 B
C888 0.001 B
C897 0.1 B
C898 6.3V 220 V-S
C891 0.1 B
C892 0.1 B
C893 0.1 B
C894 0.1 B
C895 0.1 B
C896 0.1 B
C889 0.1 B
C890 0.1 B
C885 0.1 B
C886 0.1 B
C878 0.1 B
C877 0.1 B
C873 0.1 B
C871 0.1 B
C863 0.1 B
C860 0.1 B
C857 0.1 B
C853 0.1 B
C851 0.1 B
C835 0.1 B
C849 0.1 B
C852 0.1 B
C855 0.1 B
C858 0.1 B
C862 0.1 B
C870 0.1 B
C872 0.1 B
C875 0.1 B
C879 0.1 B
C884 0.1 B
C836 0.1 B 1.6
C837 0.1 B 1.2
C838 0.1 B 0.7
C839 0.1 B 1.6
C840 0.1 B 1.1
C841 0.1 B 0.7
C830 0.1 B
C842 0.1 B
C843 0.1 B 1.6
C844 0.1 B 1.1
C832 0.1 B 0.5
C845 0.1 B 1.6
C846 0.1 B 1.1
C847 0.1 B 0.5
C859 0.1 B
C876 0.1 B
C834 0.1 B
C2238 2.2 B
C2239 2.2 B
C2240 2.2 B
C2241 2.2 B
C2242 2.2 B
NR801 4D03WGJ0010T5E
NR808 4D03WGJ0010T5E
NR809 4D03WGJ0010T5E
NR803 4D03WGJ0470T5E
NR804 4D03WGJ0470T5E
NR805 4D03WGJ0470T5E
NR806 4D03WGJ0470T5E
NR807 4D03WGJ0470T5E
NR802 4D03WGJ0470T5E
B801 DIGITAL+3.3V BLM18PG181SN1D
B802 ANALOG+3.3V BLM18PG181SN1D
B803 FCM1608CF-600T06
B804 FCM1608CF-600T06
B805 BLM18PG181SN1D
W810
W807
W805
W824
W875
W873
W931
W802
W930
W809
W929
W801
W883
D807 1SS355
D808 1SS355
D802 UDZS5.6B
D803 UDZS5.6B
D805 UDZS5.6B
R880 0
C810 0.1 B
SCALER_RESET
SW_R/SW_CR
SW_VIDEO_C
SW_VIDEO_Y
SW_B/SW_CB
SW_VIDEO_C
4SI_SCL
4SI_SDA_OUT
4SI_SDA_IN
4SI_CHIP_SE
P.CON+3.3V
GND
DPR3 DPR2 DPR1 DPR0 DPB7 DPB6 DPB5 DPB4 DPB3 DPB2 DPG7 DPG6 DPG5 DPG4 DPG3 DPG2 DPR4 DPR5 DPR6 DPR7 DDVS DDHS
PXD23 DVDD15 DGND
DGND DVDD15 QBR4
QGL0 DVDD15 DGND
DGND DVDD15 MPWEL
DDHS DDVS DDCK DPR7 DPR6 DPR5 DPR4 DPR3 DPR2 DPR1 DPR0 LCD-H LCDON LIGHT_CTL STEREO_RESET AUDIO_MUTE SDA1 SCL1 SCALER_RESET 4SI_CHIP_SE 4SI_SDA_OUT 4SI_SDA_IN 4SI_SCL S_DET SW_SCART SCART_AUDIO_SW DVS DVB_FAN_ON-H DTUNER_H DVD/AV3 DVB_MUTE-L DVB_RX DVB_TX DVB_RESET-L DVB_POWER_CTL-H SD_H AFT_1[LOW] AFT_2[HIGH]
DR2 DR3 DR4 DR5 DR6 DR7 DR8 DR9 DB2 DB3 DB4 DB5 DB6 DB7 DB8 DB9 DG2 DG3 DG4 DG5 DG6 DG7 DG8 DG9 DCLK1 DVS DHS DEN
P.CON+1.5V P.CON+3.3V GND
SW_AUDIO_R[PC] SW_AUDIO_L[PC]

FROM/TO ADC
FROM/TO MICON
FROM/TO LVDS
FROM/TO REGULATOR
FROM/TO JACK

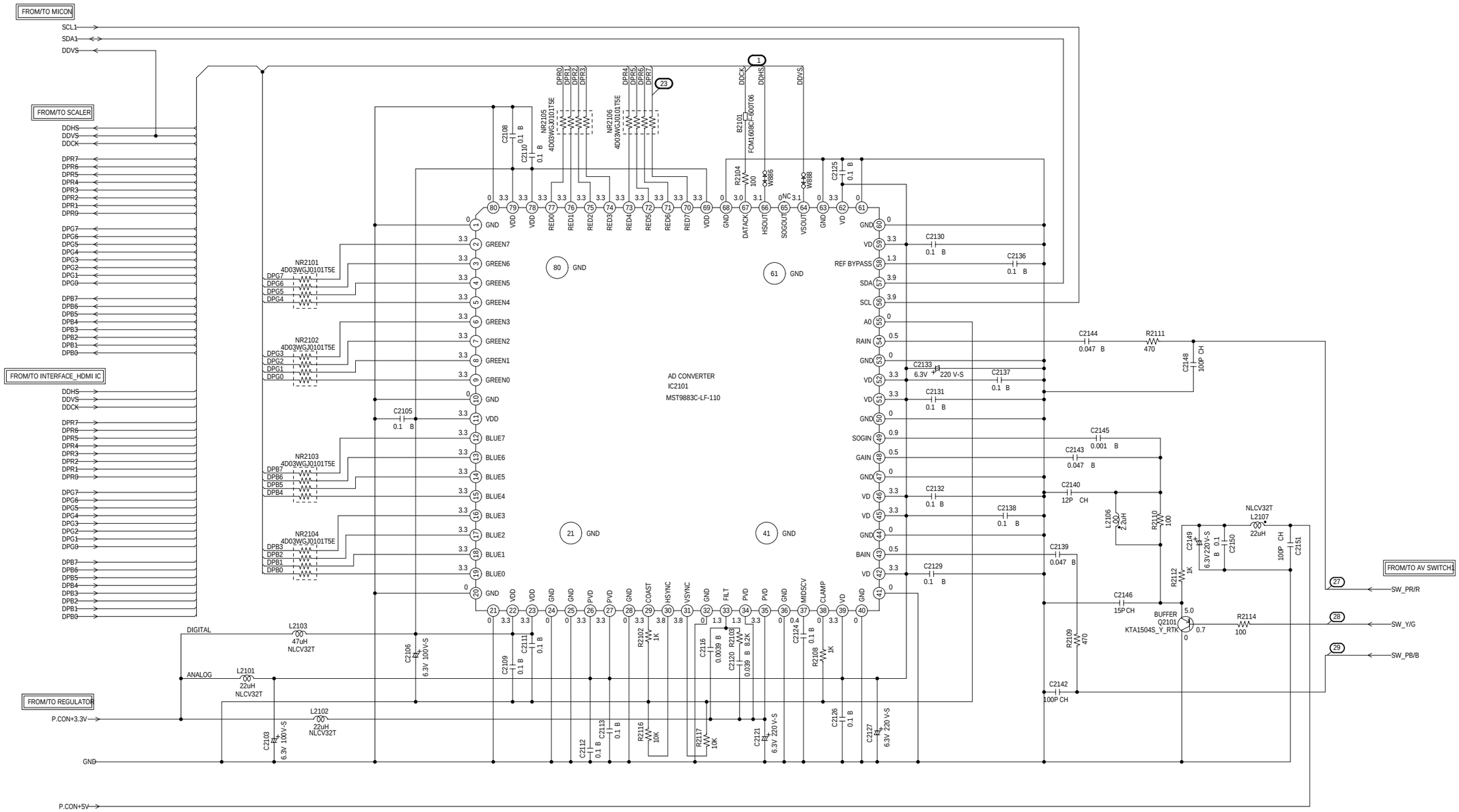
NOTE:THE DC VOLTAGE AT EACH PART WAS MEASURED WITH THE DIGITAL TESTER WHEN THE COLOR BROADCAST WAS RECEIVED IN GOOD CONDITION AND PICTURE IS NORMAL.

NOTE: THIS SCHEMATIC DIAGRAM IS THE LATEST AT THE TIME OF PRINTING AND SUBJECT TO CHANGE WITHOUT NOTICE。

PCBDSD CEF170

ADC SCHEMATIC DIAGRAM

(SCALER PCB)



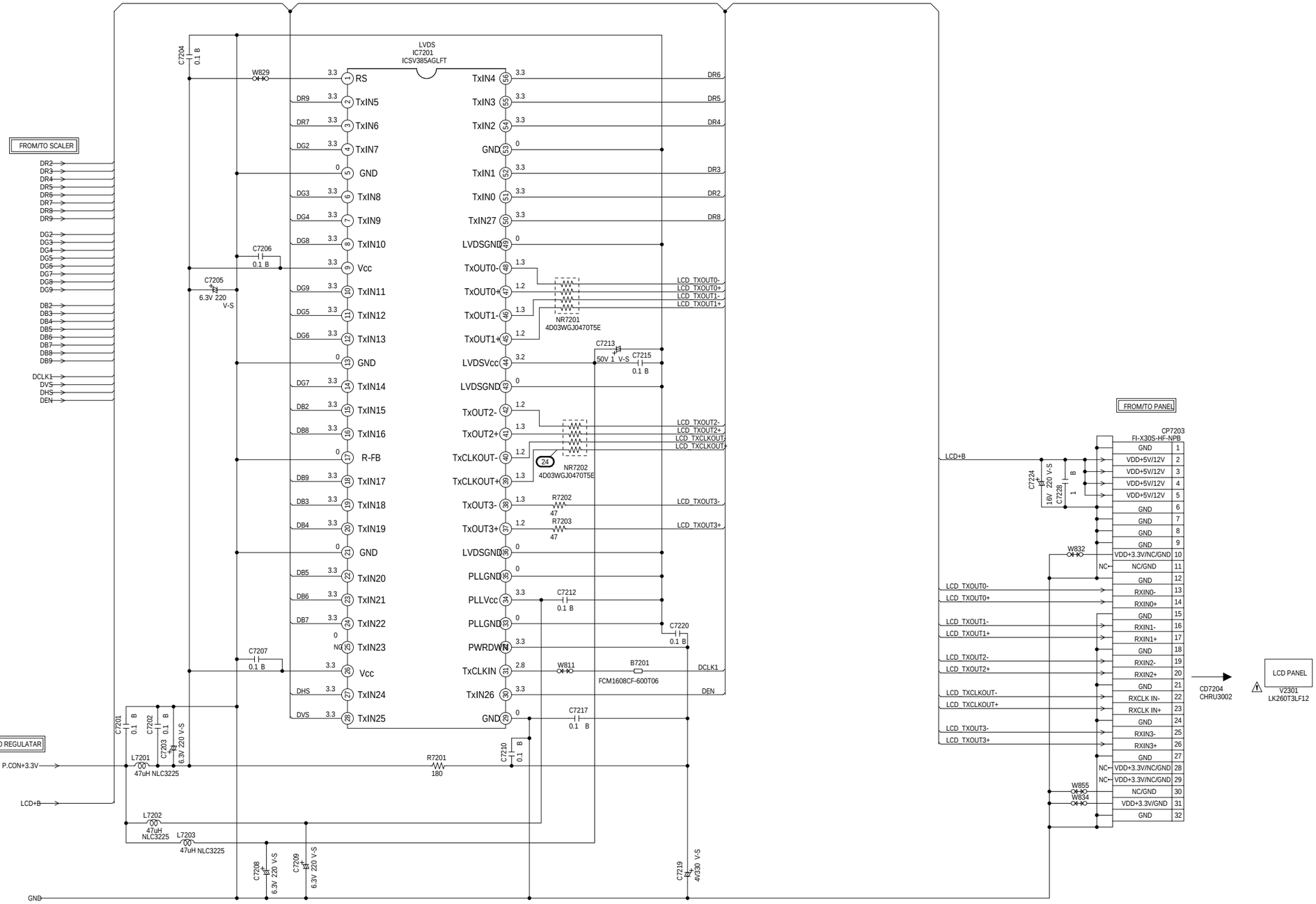
NOTE:THE DC VOLTAGE AT EACH PART WAS MEASURED WITH THE DIGITAL TESTER WHEN THE COLOR BROADCAST WAS RECEIVED IN GOOD CONDITION AND PICTURE IS NORMAL.

NOTE: THIS SCHEMATIC DIAGRAM IS THE LATEST AT THE TIME OF PRINTING AND SUBJECT TO CHANGE WITHOUT NOTICE 。

PCBDSC
CEF170

LVDS SCHEMATIC DIAGRAM

(SCALER PCB)



CAUTION SINCE THESE PARTS MARKED BY ⚠ ARE CRITICAL FOR SAFETY,USE ONES DESCRIBED IN PARTS LIST ONLY 。

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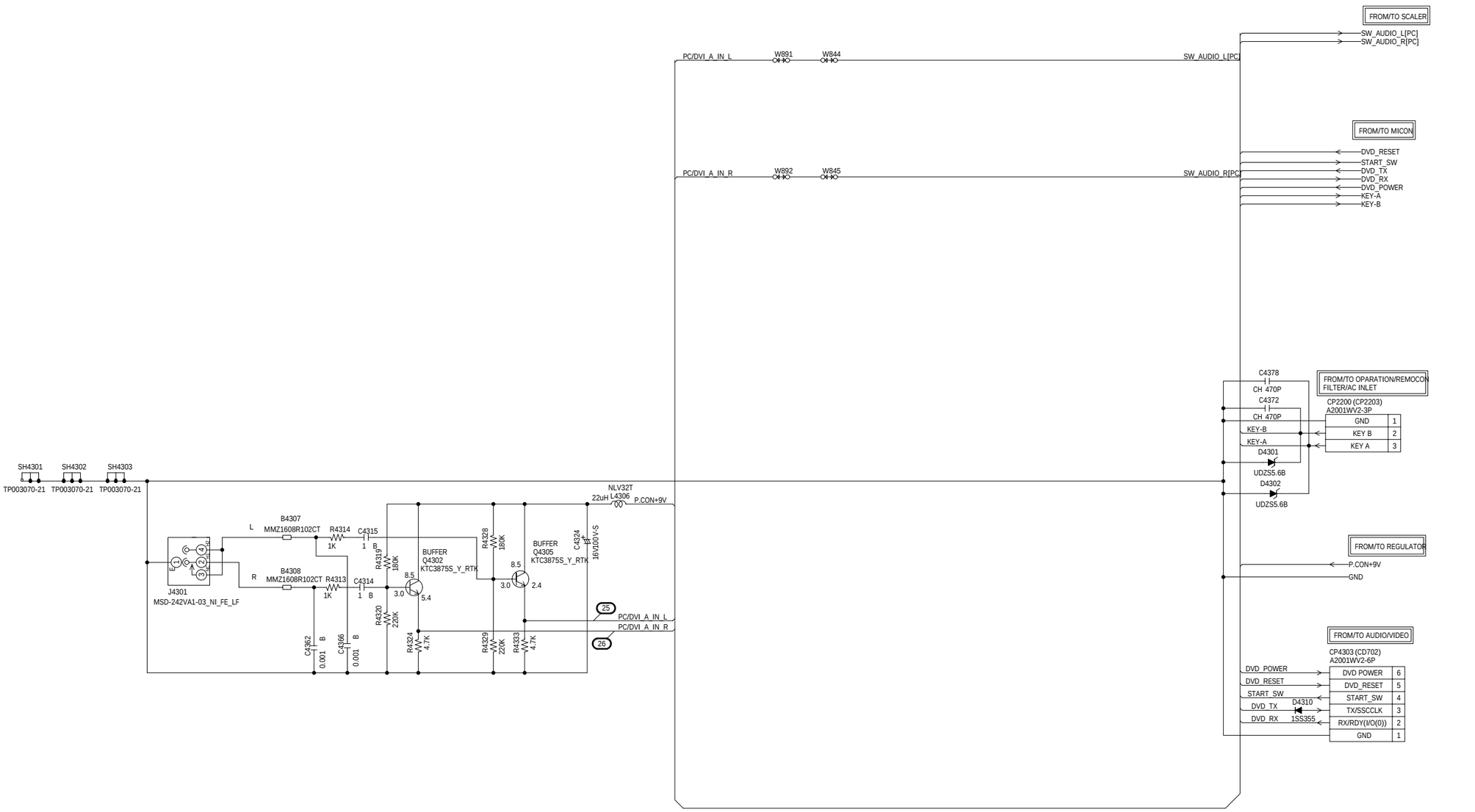
NOTE:THIS SCHEMATIC DIAGRAM IS THE LATEST AT THE TIME OF PRINTING AND SUBJECT TO CHANGE WITHOUT NOTICE 。

PCBDS0
CEF170

JACK SCHEMATIC DIAGRAM

(SCALER PCB)

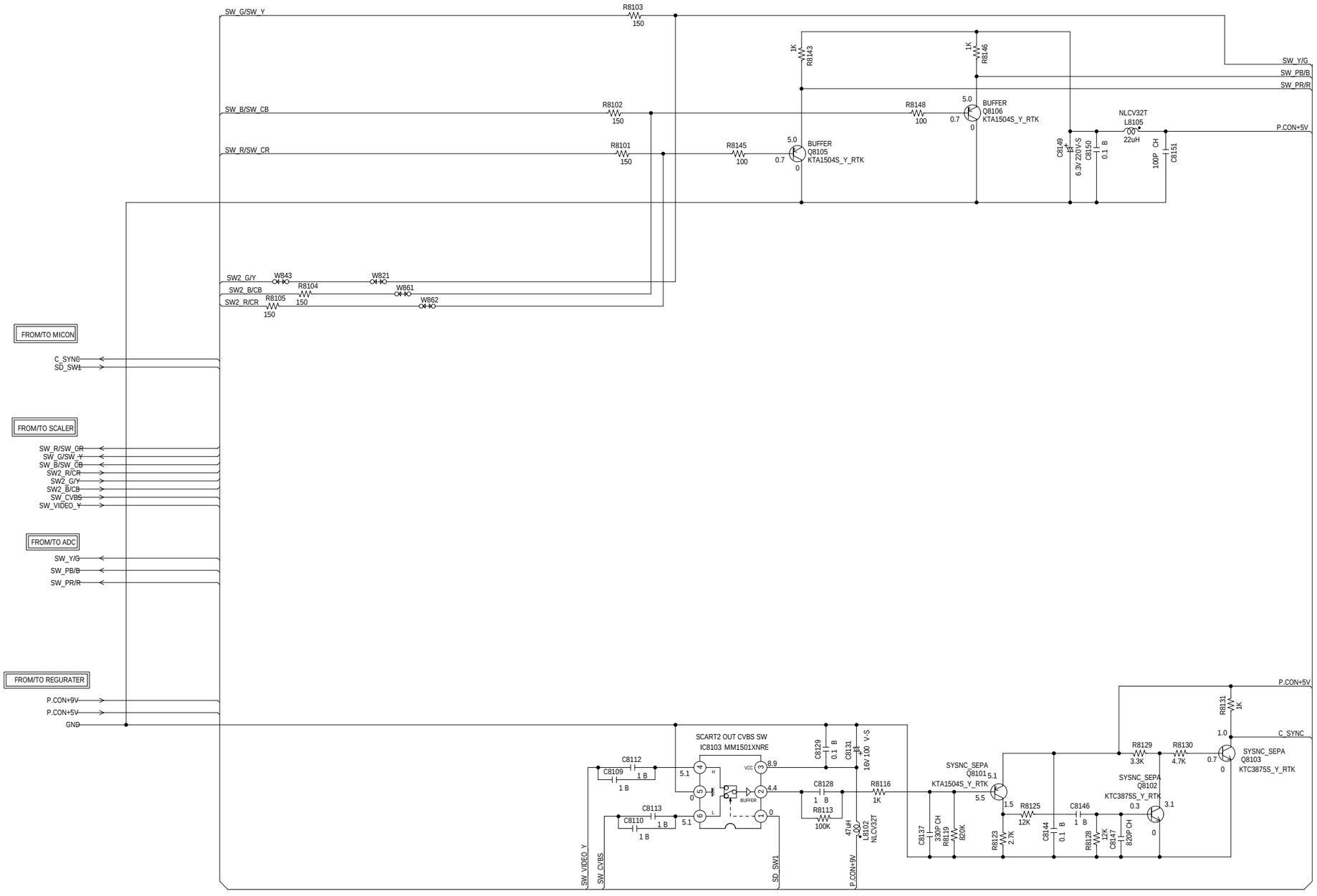


NOTE: THIS SCHEMATIC DIAGRAM IS THE LATEST AT THE TIME OF PRINTING AND SUBJECT TO CHANGE WITHOUT NOTICE 。

NOTE:THE DC VOLTAGE AT EACH PART WAS MEASURED WITH THE DIGITAL TESTER WHEN THE COLOR BROADCAST WAS RECEIVED IN GOOD CONDITION AND PICTURE IS NORMAL.

AV SWITCH1 SCHEMATIC DIAGRAM

(SCALER PCB)



NOTE: THIS SCHEMATIC DIAGRAM IS THE LATEST AT THE TIME OF PRINTING AND SUBJECT TO CHANGE WITHOUT NOTICE 。

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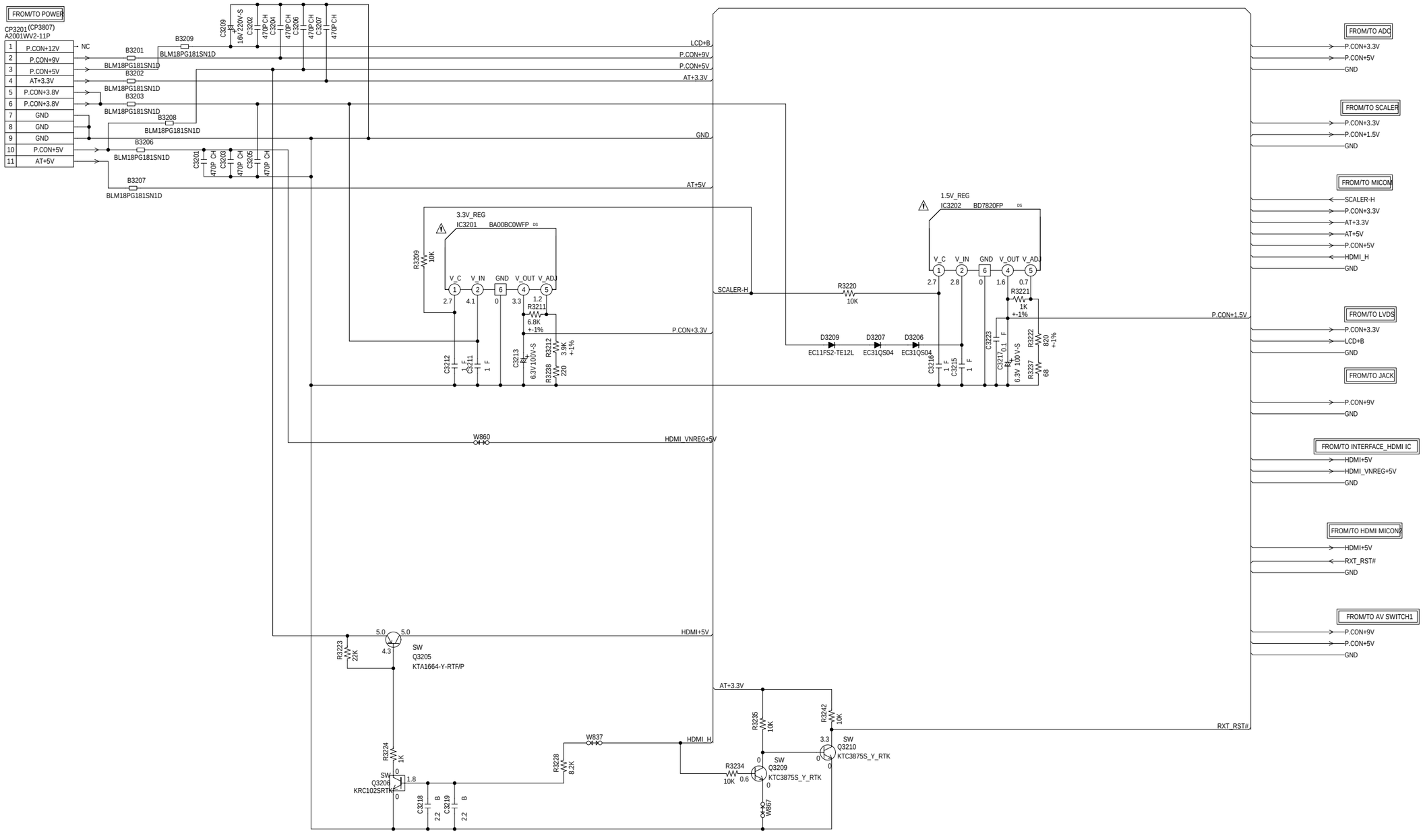
PCBDSC CEF170

REGULATOR SCHEMATIC DIAGRAM

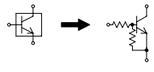
(SCALER PCB)



CAUTION SINCE THESE PARTS MARKED BY ⚠ ARE CRITICAL FOR SAFETY,USE ONES DESCRIBED IN PARTS LIST ONLY 。

ATTENTION :LES PIECES REPAREES PAR UN ⚠ ETANT DANGEREUSES AN POINT DE VUE SECURITE N'UTILISER QUE CELLS DECRITES DANS LA NOMENCLATURE DES PIECES。

CAUTION: DIGITAL TRANSISTOR



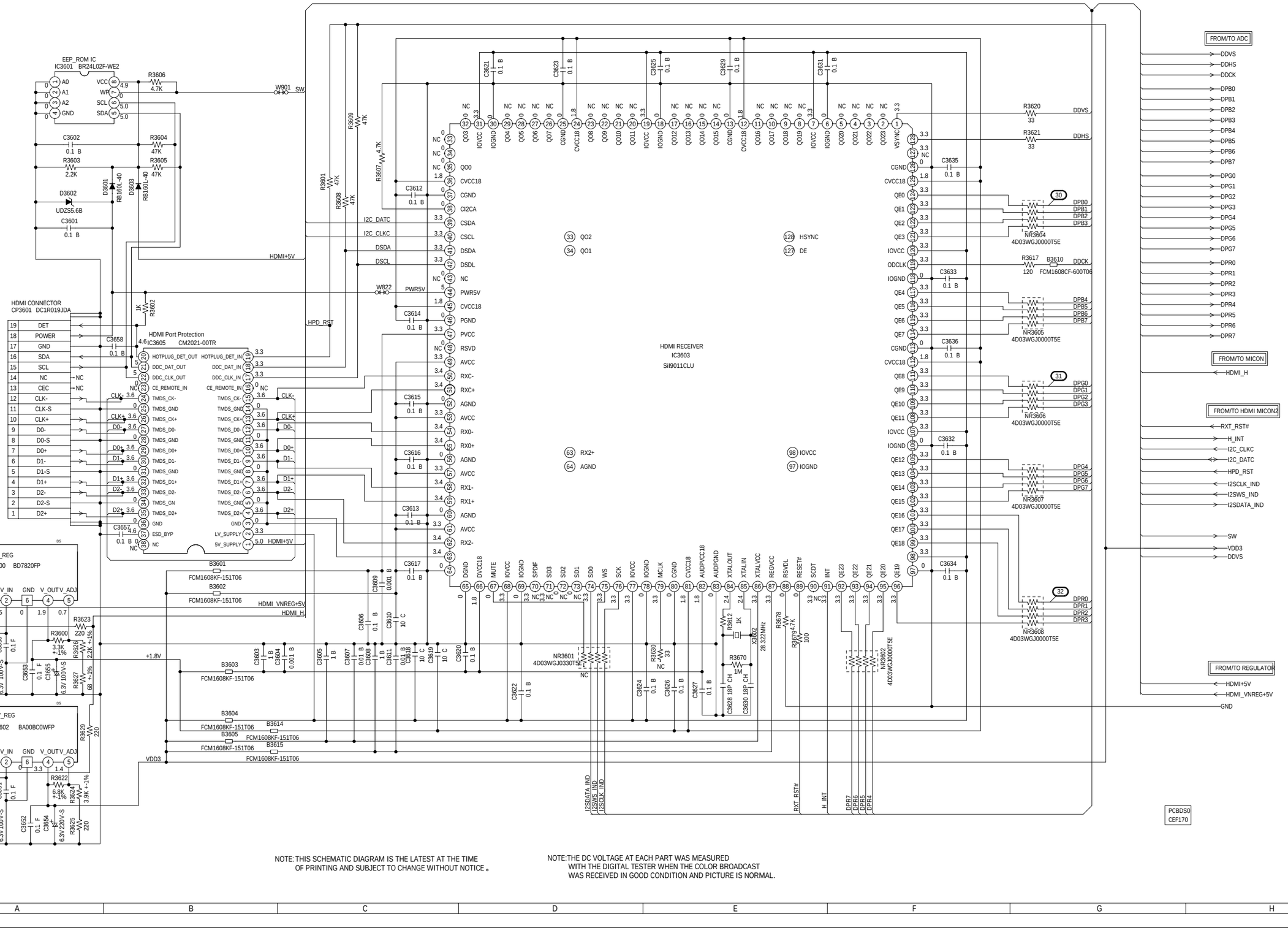
NOTE:THE DC VOLTAGE AT EACH PART WAS MEASURED WITH THE DIGITAL TESTER WHEN THE COLOR BROADCAST WAS RECEIVED IN GOOD CONDITION AND PICTURE IS NORMAL.

NOTE: THIS SCHEMATIC DIAGRAM IS THE LATEST AT THE TIME OF PRINTING AND SUBJECT TO CHANGE WITHOUT NOTICE 。

PCBDSO CEF170

INTERFACE_HDMI IC SCHEMATIC DIAGRAM

(SCALER PCB)

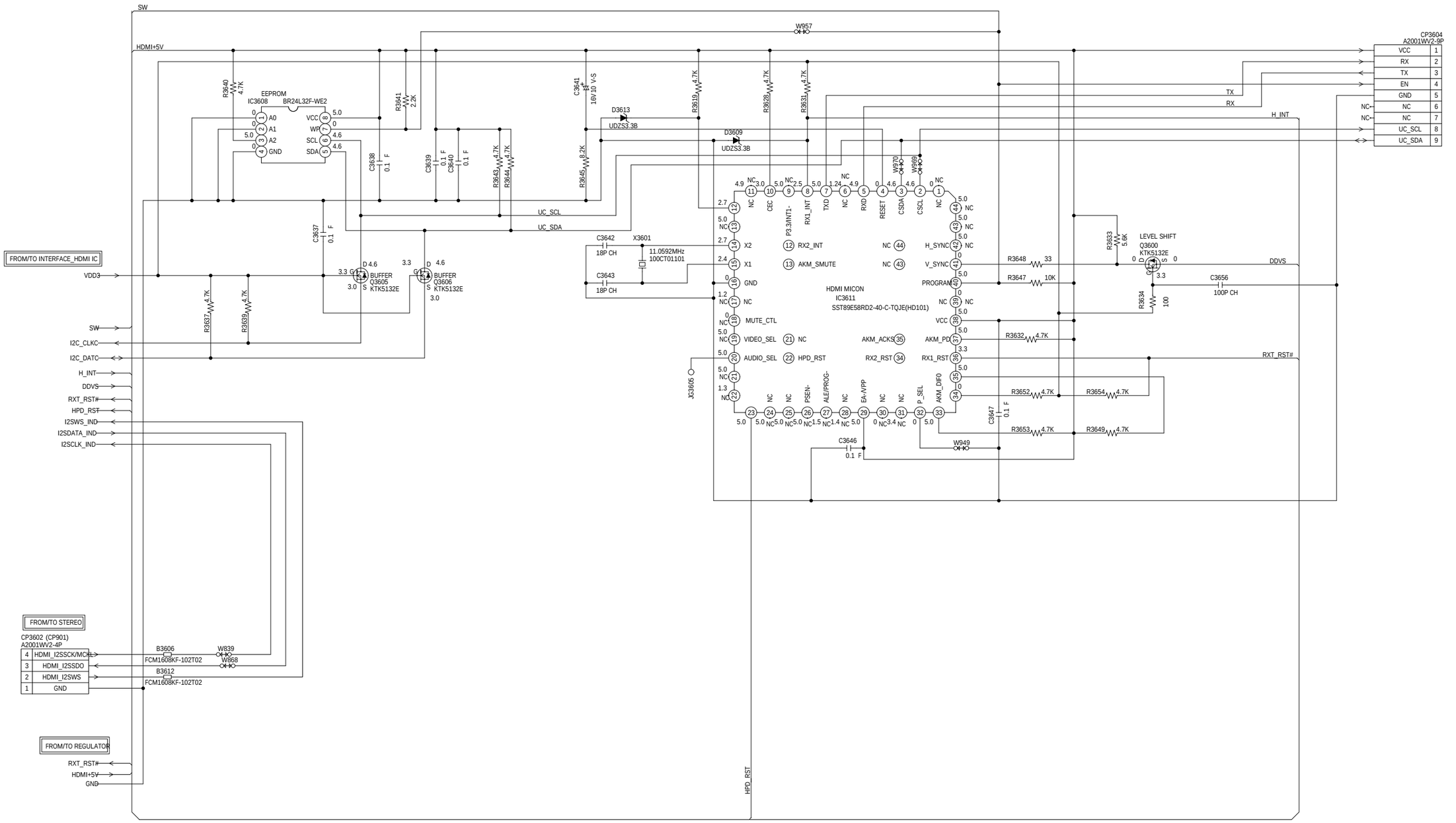


NOTE: THIS SCHEMATIC DIAGRAM IS THE LATEST AT THE TIME OF PRINTING AND SUBJECT TO CHANGE WITHOUT NOTICE 。

NOTE: THE DC VOLTAGE AT EACH PART WAS MEASURED WITH THE DIGITAL TESTER WHEN THE COLOR BROADCAST WAS RECEIVED IN GOOD CONDITION AND PICTURE IS NORMAL.

HDMI MICON2 SCHEMATIC DIAGRAM

(SCALER PCB)



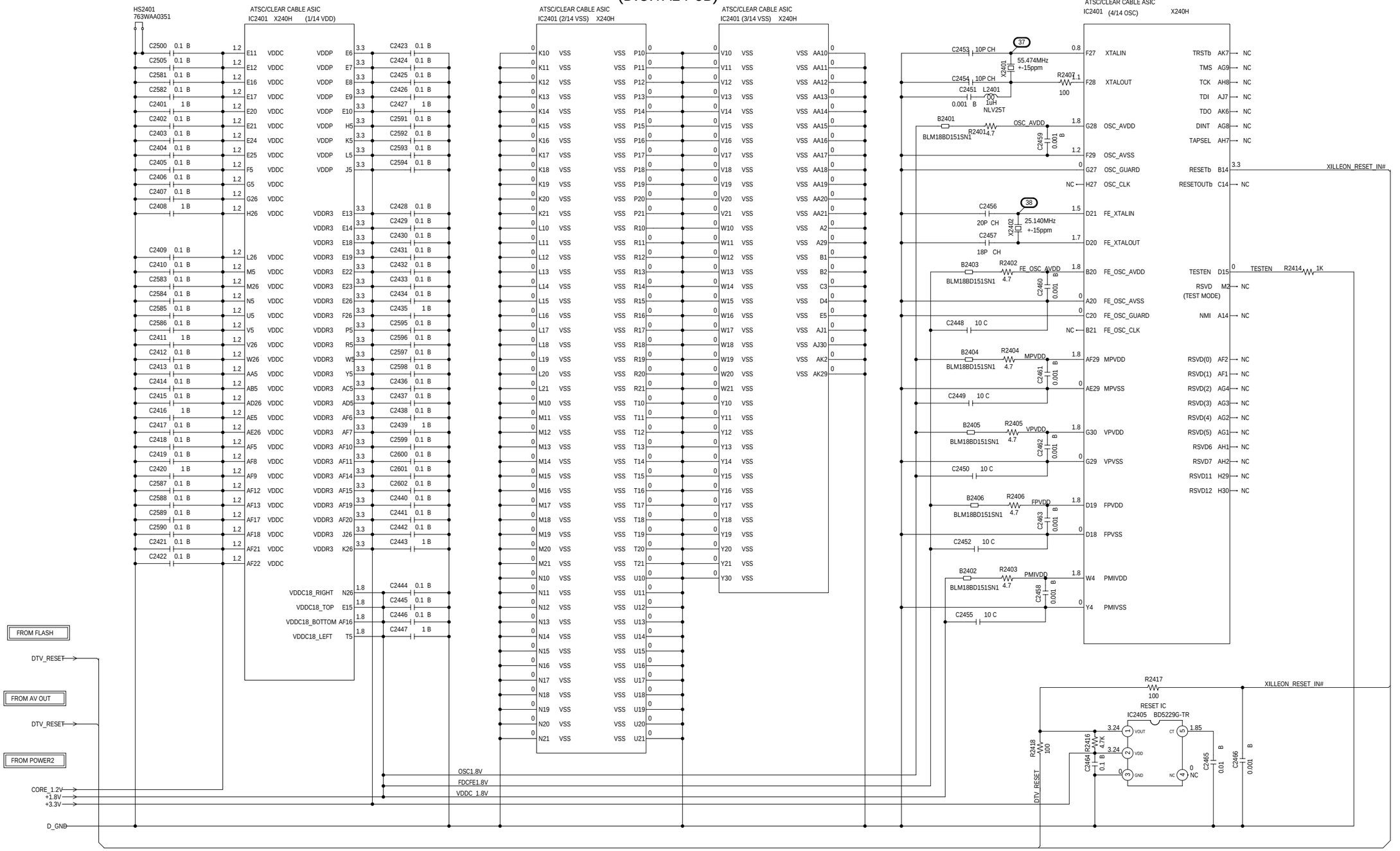
NOTE: THIS SCHEMATIC DIAGRAM IS THE LATEST AT THE TIME OF PRINTING AND SUBJECT TO CHANGE WITHOUT NOTICE 。

NOTE:THE DC VOLTAGE AT EACH PART WAS MEASURED WITH THE DIGITAL TESTER WHEN THE COLOR BROADCAST WAS RECEIVED IN GOOD CONDITION AND PICTURE IS NORMAL.

PCBDS0
CEF170

ASIC SCHEMATIC DIAGRAM

(DIGITAL PCB)



NOTE: THIS SCHEMATIC DIAGRAM IS THE LATEST AT THE TIME OF PRINTING AND SUBJECT TO CHANGE WITHOUT NOTICE。

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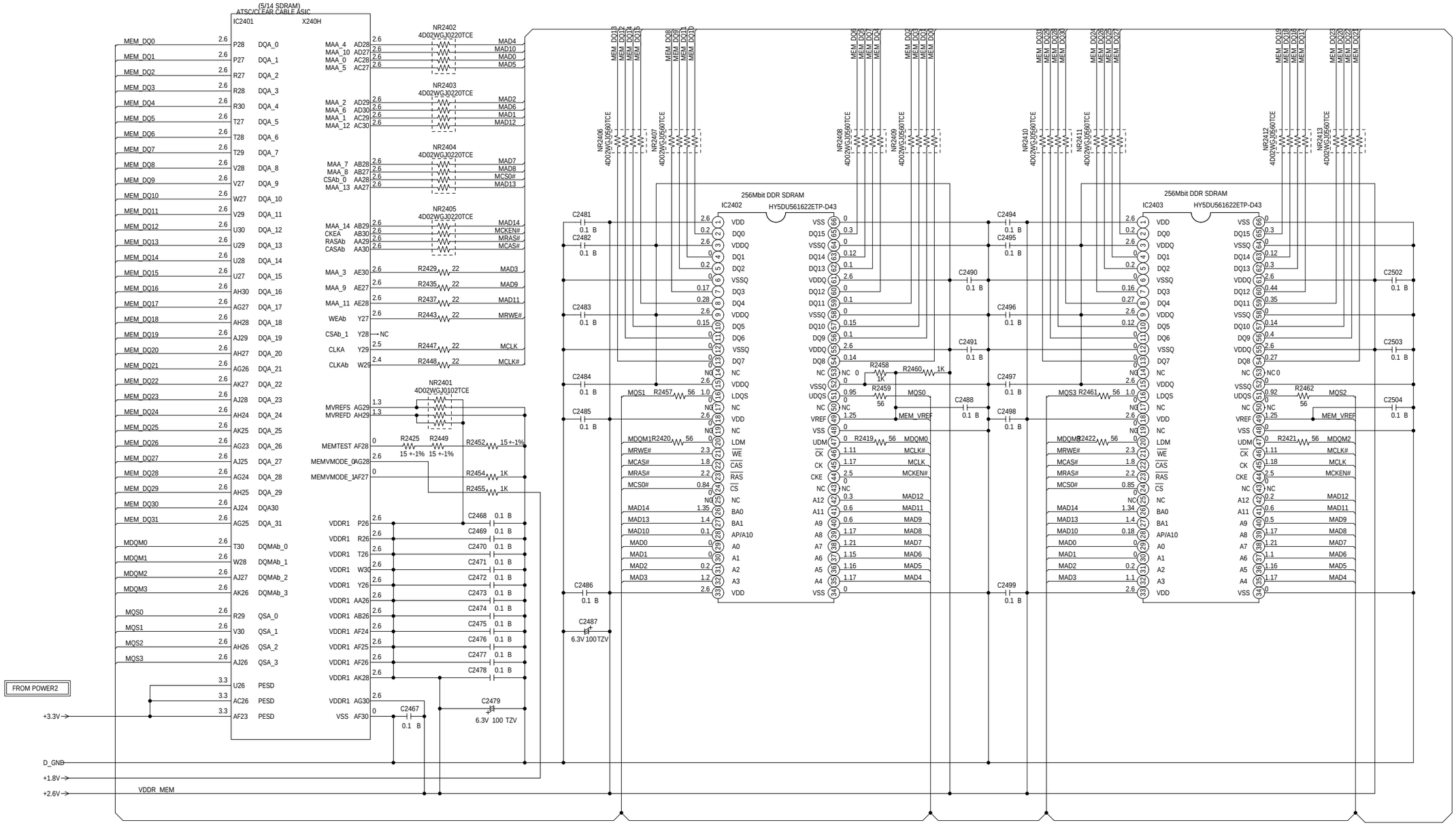
SDRAM SCHEMATIC DIAGRAM

(DIGITAL PCB)



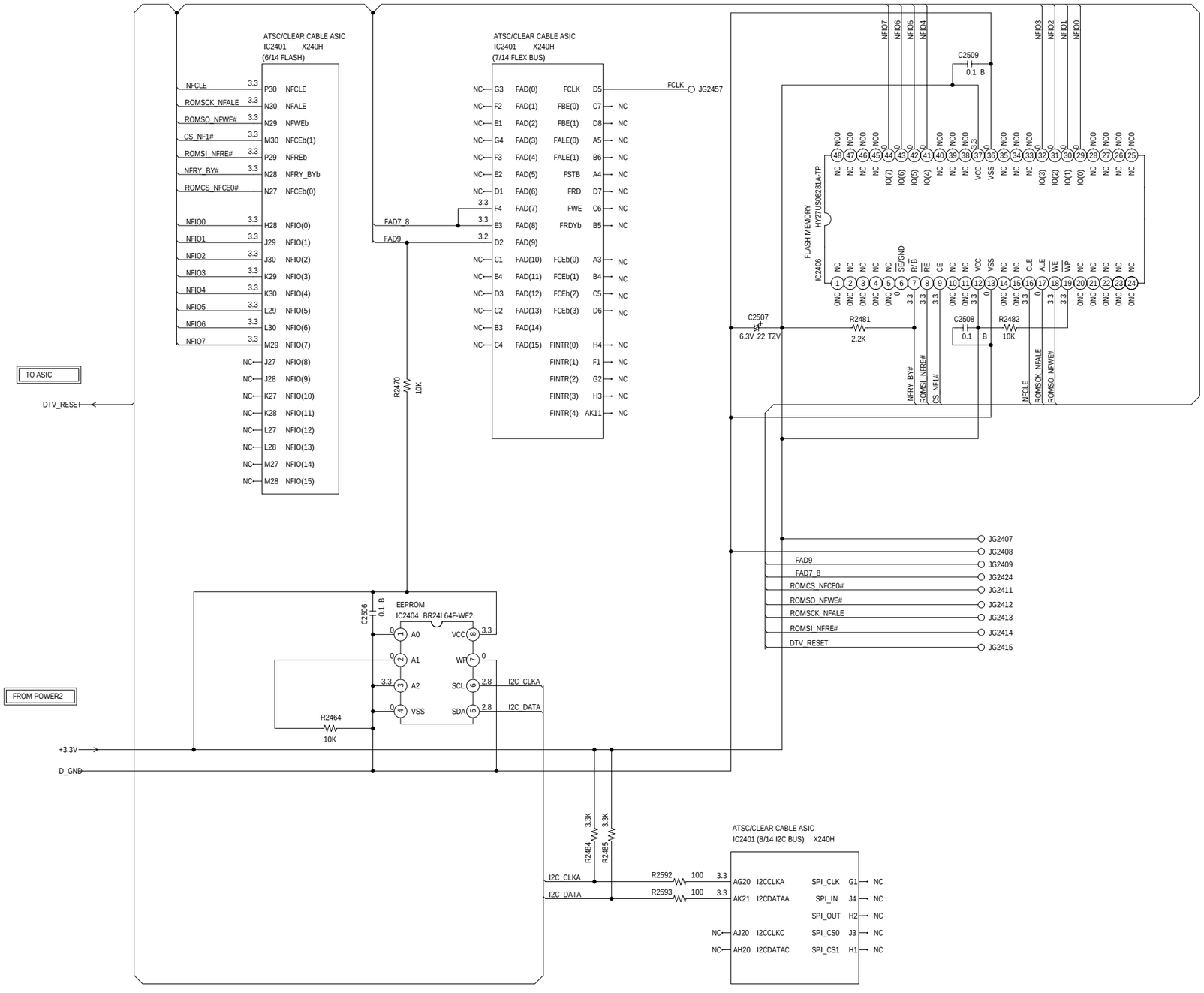
NOTE: THIS SCHEMATIC DIAGRAM IS THE LATEST AT THE TIME OF PRINTING AND SUBJECT TO CHANGE WITHOUT NOTICE。

NOTE: THE DC VOLTAGE AT EACH PART WAS MEASURED WITH THE DIGITAL TESTER WHEN THE COLOR BROADCAST WAS RECEIVED IN GOOD CONDITION AND PICTURE IS NORMAL.

PCBDH0
CEF169

FLASH SCHEMATIC DIAGRAM

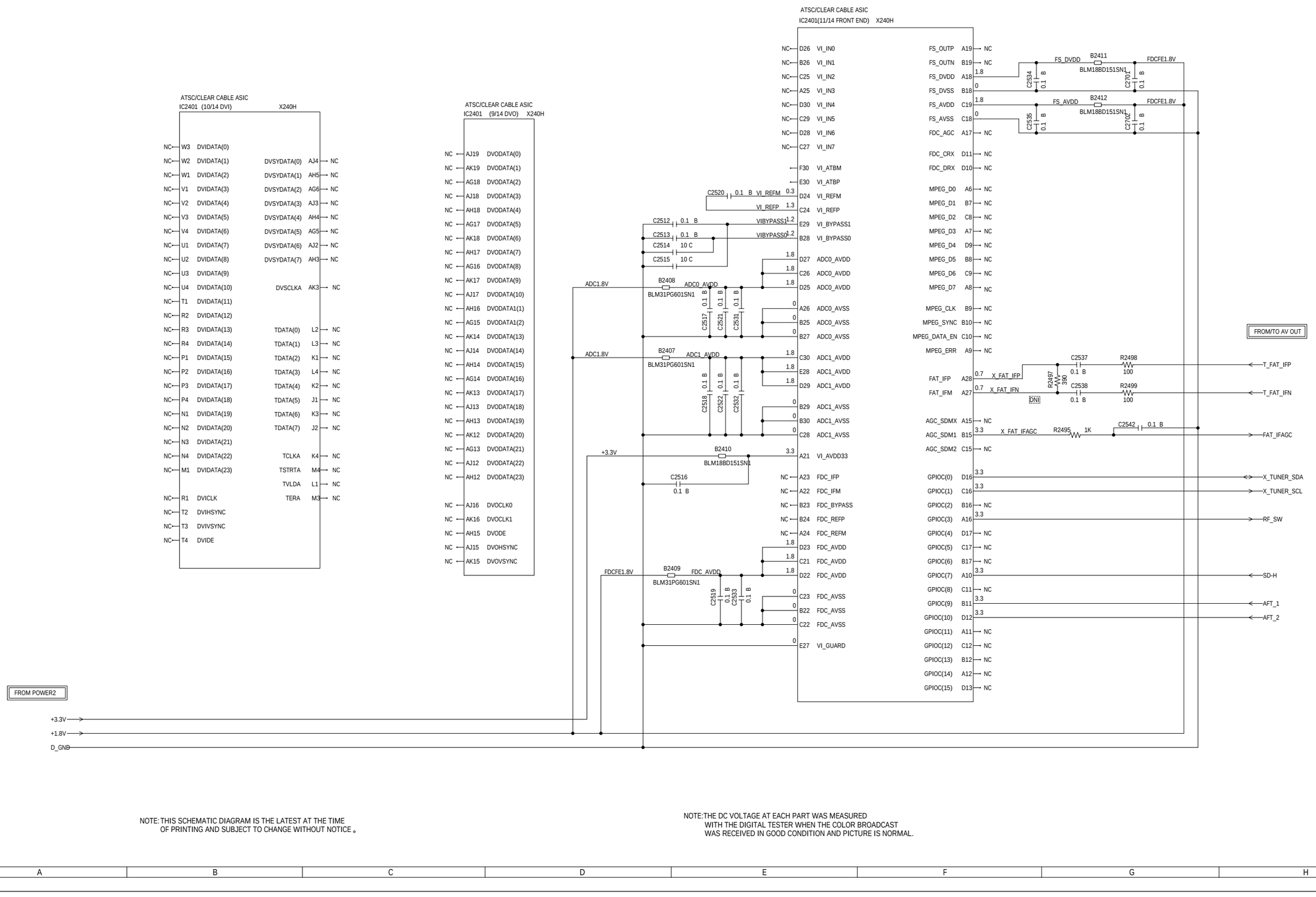
(DIGITAL PCB)



NOTE: THIS SCHEMATIC DIAGRAM IS THE LATEST AT THE TIME OF PRINTING AND SUBJECT TO CHANGE WITHOUT NOTICE。

NOTE: THE DC VOLTAGE AT EACH PART WAS MEASURED WITH THE DIGITAL TESTER WHEN THE COLOR BROADCAST WAS RECEIVED IN GOOD CONDITION AND PICTURE IS NORMAL.

FRONT END SCHEMATIC DIAGRAM
(DIGITAL PCB)



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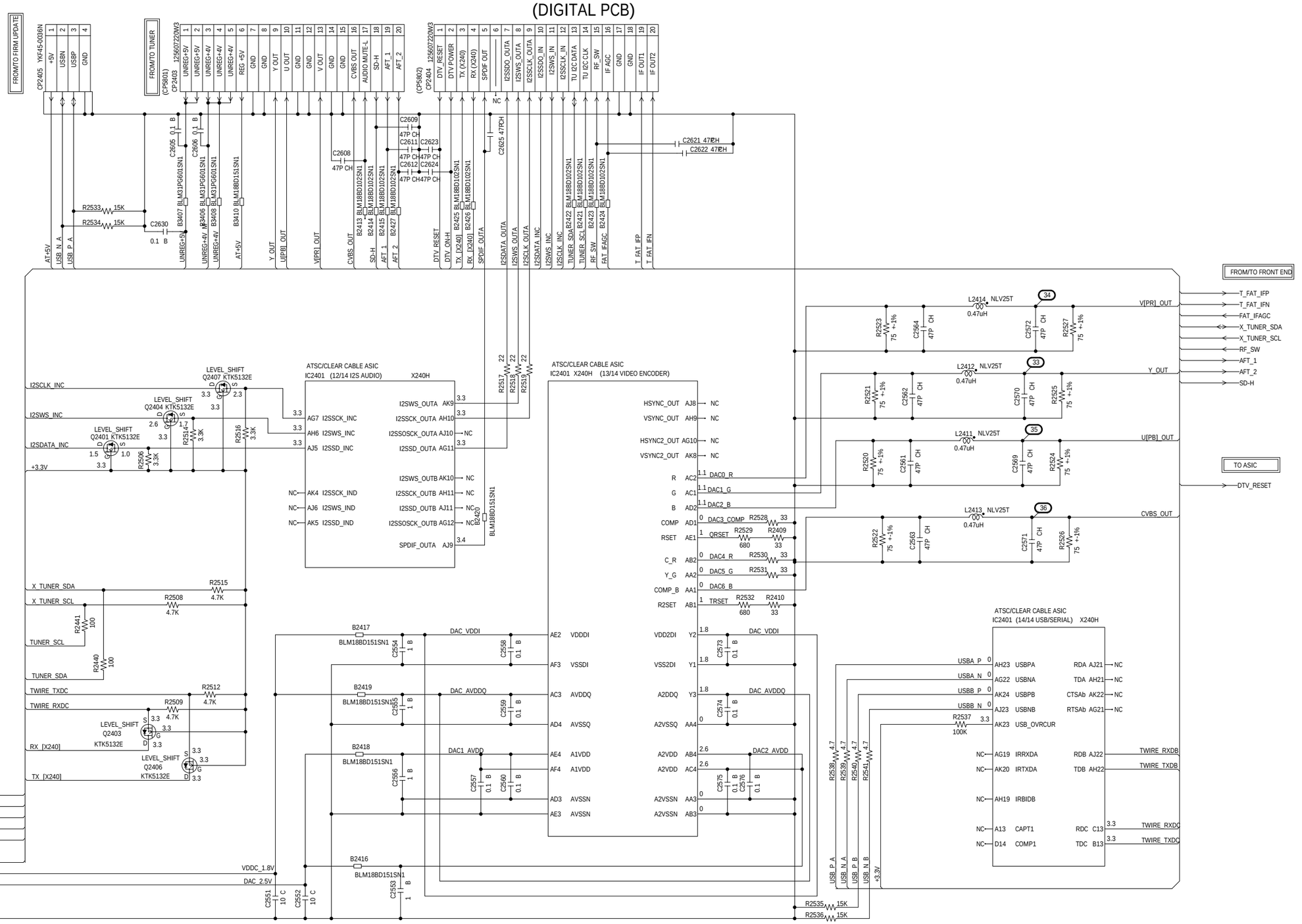
NOTE: THE DC VOLTAGE AT EACH PART WAS MEASURED WITH THE DIGITAL TESTER WHEN THE COLOR BROADCAST WAS RECEIVED IN GOOD CONDITION AND PICTURE IS NORMAL.

AV OUT SCHEMATIC DIAGRAM

(DIGITAL PCB)

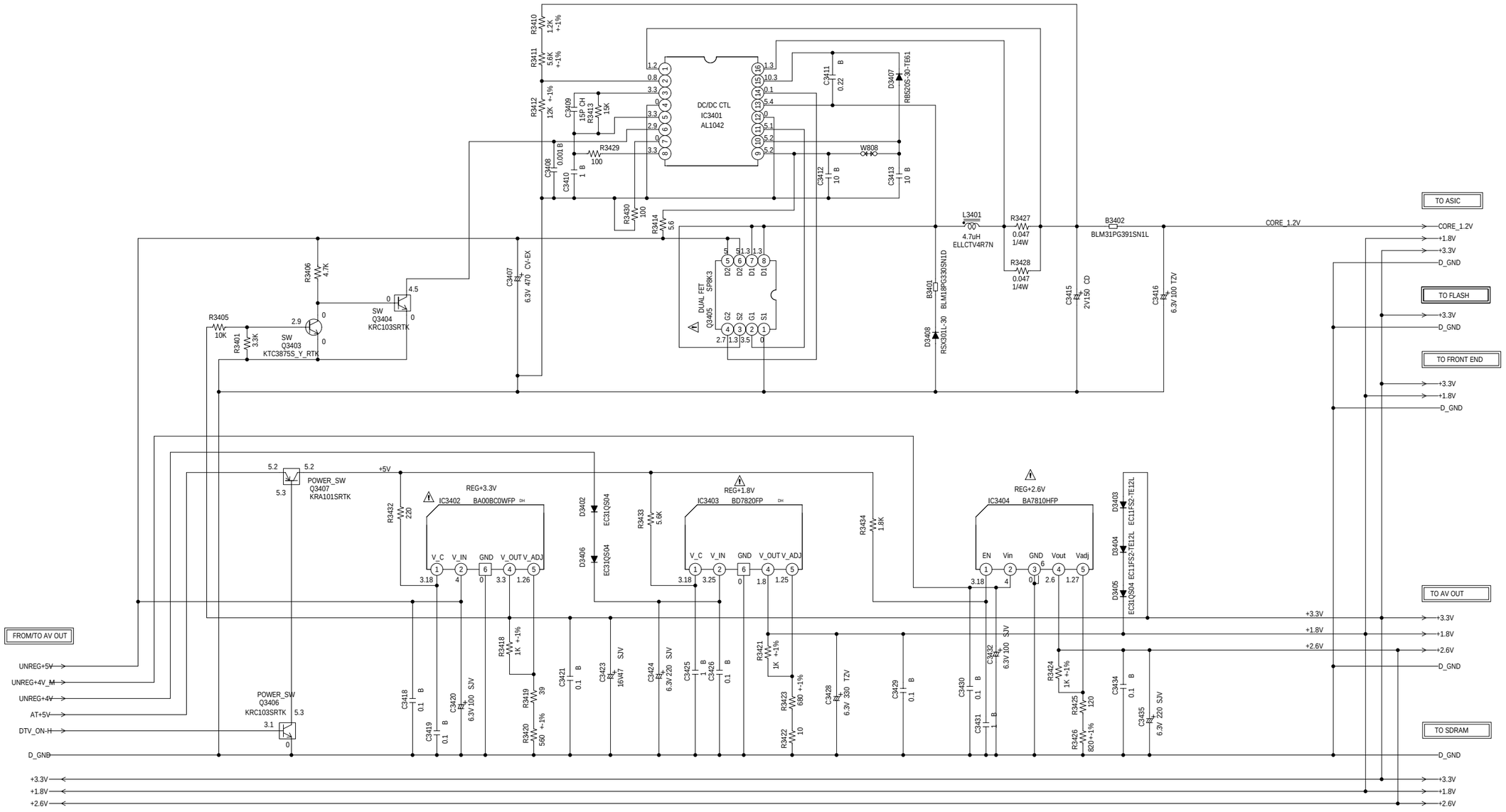


NOTE: THIS SCHEMATIC DIAGRAM IS THE LATEST AT THE TIME OF PRINTING AND SUBJECT TO CHANGE WITHOUT NOTICE。

NOTE: THE DC VOLTAGE AT EACH PART WAS MEASURED WITH THE DIGITAL TESTER WHEN THE COLOR BROADCAST WAS RECEIVED IN GOOD CONDITION AND PICTURE IS NORMAL.

POWER2 SCHEMATIC DIAGRAM

(DIGITAL PCB)



PCBDH0
CEF169

NOTE: THIS SCHEMATIC DIAGRAM IS THE LATEST AT THE TIME OF PRINTING AND SUBJECT TO CHANGE WITHOUT NOTICE 。

NOTE: THE DC VOLTAGE AT EACH PART WAS MEASURED WITH THE DIGITAL TESTER WHEN THE COLOR BROADCAST WAS RECEIVED IN GOOD CONDITION AND PICTURE IS NORMAL.

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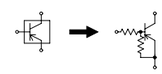
ATTENTION: LES PIECES REPAREES PAR UN ⚠ ETANT DANGEREUSES AN POINT DE VUE SECURITE N'UTILISER QUE CELLS DECRITES DANS LA NOMENCLATURE DES PIECES。

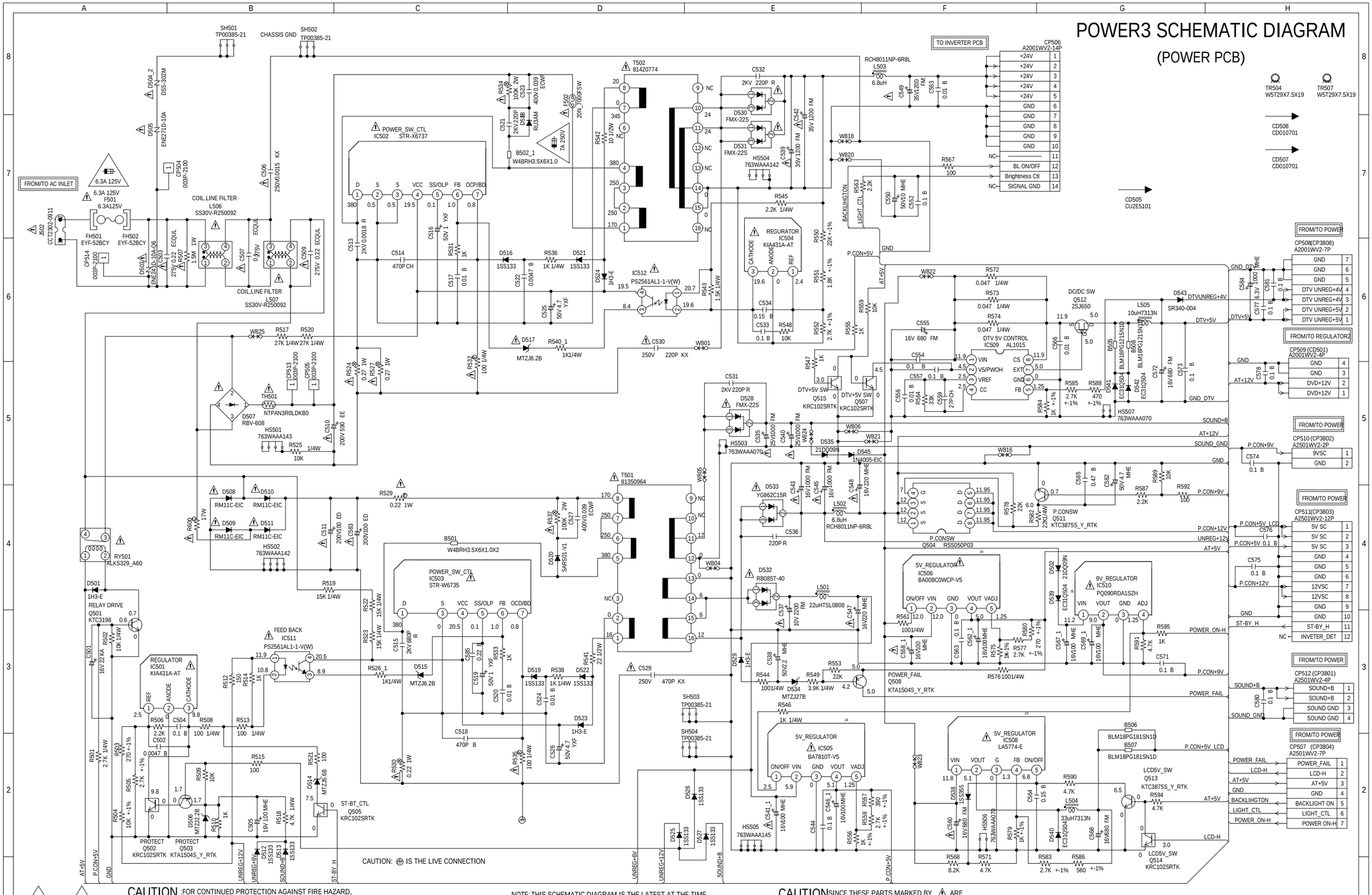
CAUTION: DIGITAL TRANSISTOR



CAUTION: DIGITAL TRANSISTOR

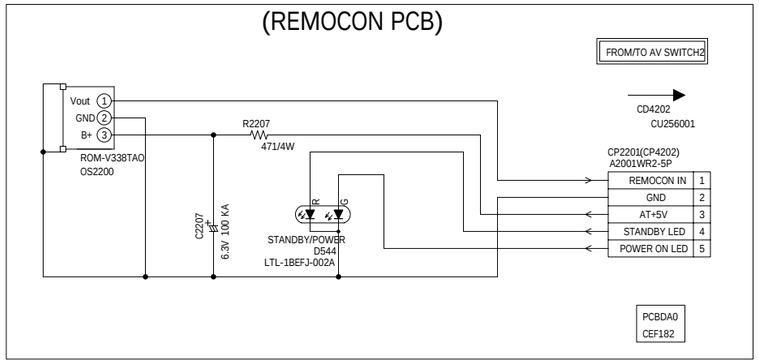
POWER3 SCHEMATIC DIAGRAM

(POWER PCB)

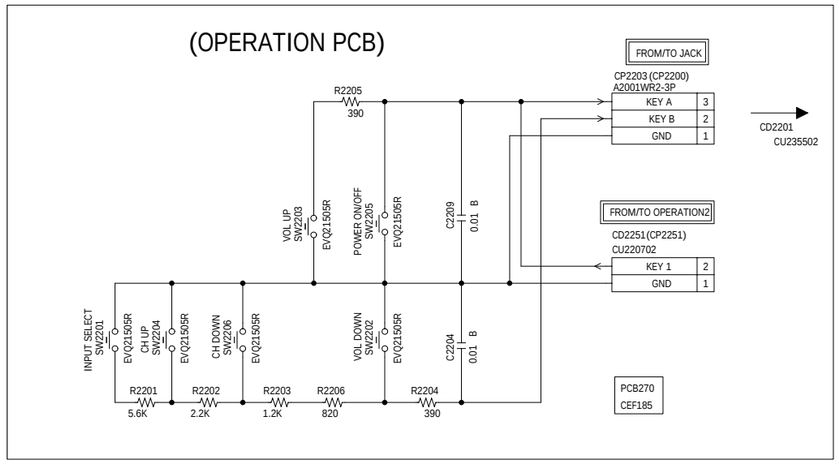


OPERATION/REMOCON/FILTER/AC INLET SCHEMATIC DIAGRAM

(REMOCON PCB)



(OPERATION PCB)



NOTE:THE DC VOLTAGE AT EACH PART WAS MEASURED WITH THE DIGITAL TESTER WHEN THE COLOR BROADCAST WAS RECEIVED IN GOOD CONDITION AND PICTURE IS NORMAL.

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MPEG/MICON/DSP/RF_AMP SCHEMATIC DIAGRAM

(DVD MT PCB)

MPEG/MICON/DSP/RF_AMP IC
IC4001
ZR36862PQCG-B

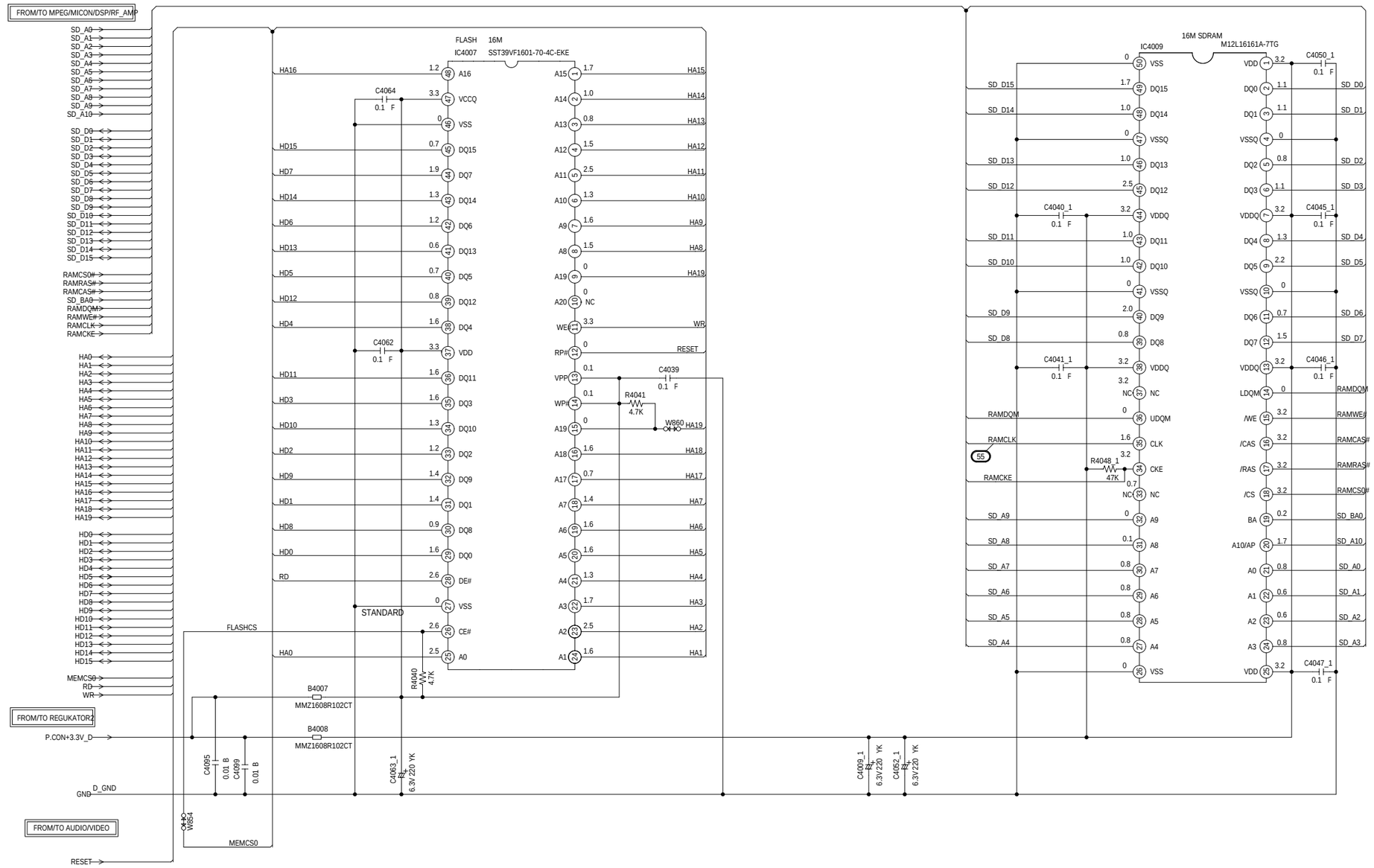
NOTE: THIS SCHEMATIC DIAGRAM IS THE LATEST AT THE TIME OF PRINTING AND SUBJECT TO CHANGE WITHOUT NOTICE 。

NOTE:THE DC VOLTAGE EACH PART WAS MEASURED WITH THE DIGITAL TESTER DURING PLAYBACK.

PCB130
DMF066

MEMORY SCHEMATIC DIAGRAM

(DVD MT PCB)



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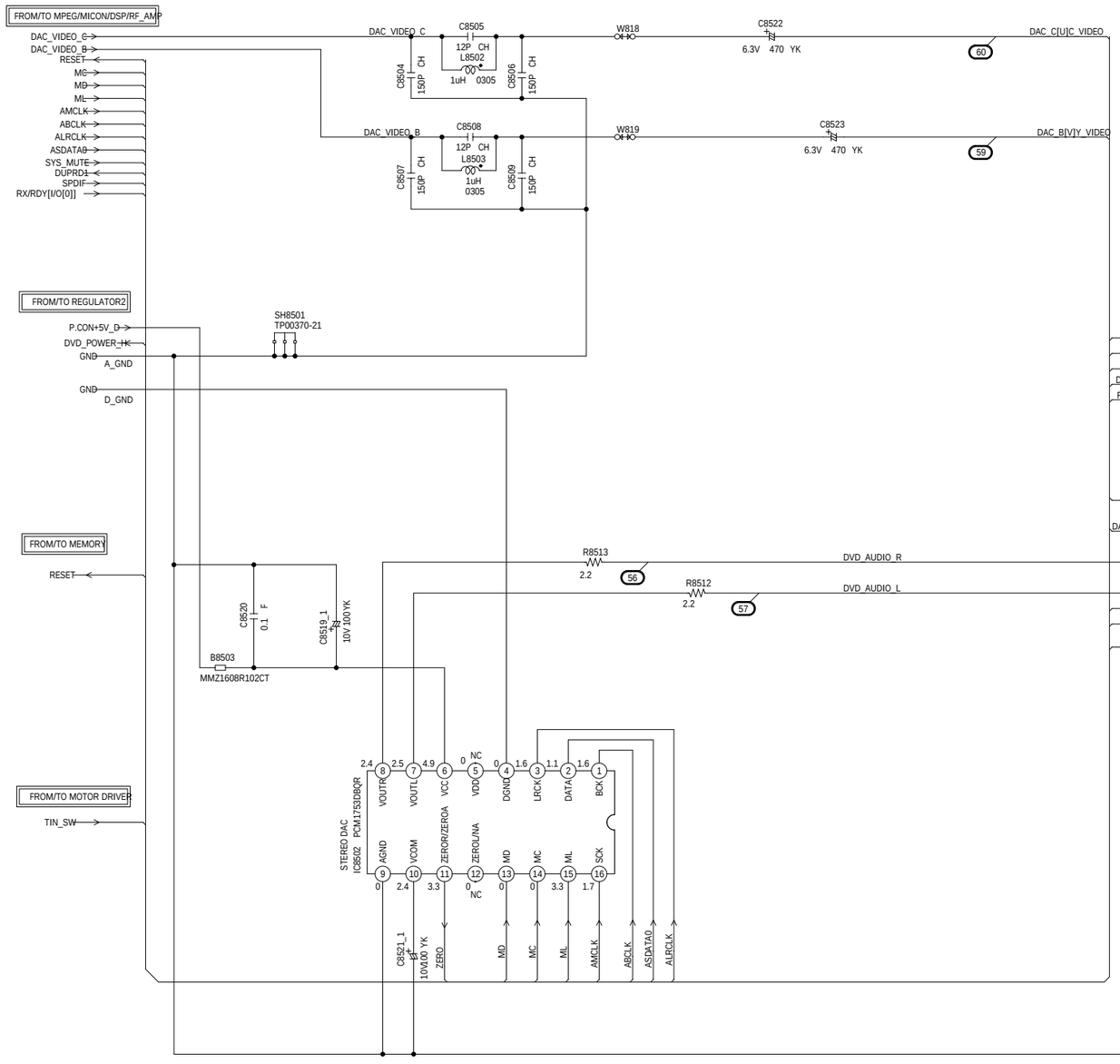
NOTE:THE DC VOLTAGE EACH PART WAS MEASURED WITH THE DIGITAL TESTER DURING PLAYBACK.

PCB130
DMF066

AUDIO/VIDEO SCHEMATIC DIAGRAM

(DVD MT PCB)

	1	2	3	4
A	Y	G	CVBS	Y
B	V	R	Y	V
C	U	B	C	U
D	C	CVBS	CVBS	CVBS



NOTE:THE DC VOLTAGE EACH PART WAS MEASURED WITH THE DIGITAL TESTER DURING PLAYBACK.

NOTE: THIS SCHEMATIC DIAGRAM IS THE LATEST AT THE TIME OF PRINTING AND SUBJECT TO CHANGE WITHOUT NOTICE 。

PCB130
DMF066

MOTOR DRIVE SCHEMATIC DIAGRAM

(DVD MT PCB)

DSM2(06SD)

FROM/TO LOADER

CP2301_1
LD07T2-24ND-03

1	GND
2	F
3	Vref
4	VCC
5	E
6	D
7	C
8	SW1(DVD/CD)
9	VRF(RF_OUT)
10	B
11	A
12	VR(DVD)
13	VR COM
14	VR(CD)
15	GND
16	LD(CD)
17	PD/GND
18	LD(DVD)
19	GND
20	NC
21	T DRV
22	T RTN
23	F DRV
24	F RTN

CP2302
00_6232_005_006_800+

5	CLOSE
4	OPEN
3	GND(D)
2	LD-
1	LD+

CP2303
00_6232_006_006_800+

6	SW(GND)
5	LIMIT SW
4	SLD-
3	SLD+
2	SP1-
1	SP1+

FROM/TO MPEG/MICON/DSP/RF_AMP

DVD/CDPD
DVD_CD
DVD_LD
CD_LD
RF
OPU_A
OPU_B
OPU_C
OPU_D
OPU_E
OPU_F
VC
HOME
GND (RF_GND)

TOUT_SW
TIN_SW
TRACK_PWM
FOCUS_PWM
VDDPWM3.3V
DRVSB
SPINDLE_PWM
SLED_PWM
SPDL_SENS+
SPDL_SENS-
TRAY_CLOSE
TRAY_OPEN

FROM/TO AUDIO/VIDEO
TIN_SW

FROM/TO REGULATOR2
UNREG+12V_D
P.CON+A5V_D
P.CON+6V_D
P.CON+3.3V_D
GND (D_GND,M_GND)

MOTOR DRIVE IC
IC2301
LA6565VR-TLM-E

1 FWD	2 REV	3 VCC2	4 NC	5 VLD-	6 VLD+	7 VD4+	8 VD4-	9 VD3+	10 VD3-	11 PGND2	12 PGND1	13 VD2+	14 VD2-	15 VD1-	16 VD1+	17 NC	18 VCC1	19 VCCS	20 VIN1+A	21 VIN1-A	22 VIN1
0	0	6.0	0 NC	1.9	1.9	2.6	2.7	2.6	2.8	0	0	3.7	1.7	2.6	2.7	0 NC	6.0	6.0	1.6	1.6	1.6

R2338 4.7K	0	4.1	3.2	3.2	1.6	0 NC	1.6	1.6	0	NC	1.6	0 NC	0 NC	0	0	0NC	1.6	1.6	0 NC	1.8	1.6	1.6	0 NC
	44 S-GND	43 VCONT	42 MUTE	41 MUTE23	40 VIN4-	39 NC	38 VIN4	37 VREF-IN	36 VREF-OUT	35 REG-OUT	34 NC	33 REG-IN	32 VIN-OP	31 VIN-OP	30 VO_OP	29 VIN3	28 VIN3-	27 NC	26 VIN2	25 VIN2-	24 VIN2+	23 NC

R2337 10K
R2330 1K
TP2316
TP2317
(M_GND)

B2304
MMZ1608R102CT
P.CON+A5V_D
RF_A5V
(RF_GND)
(D_GND)

C2232 0.1 F
C2346_1 6.3V 47 KA
C2347 0.1 F
C2316_1 6.3V 47 KA
C2218 1000 B

C2328_1 6.3V 47 KA
C2348 0.1 B
C2309 0.1 F
C2317 0.1 F
C2327_1 6.3V 47 KA
C2326 0.1 F

R2355 1K
R2359 82
R2356 82
R2360 33

VR_CD
Q2305
KTC3875S_Y_RTK
VR_DVD
Q2303
KTC3875S_Y_RTK
DVD/CD SW
Q2304
KTC3875S_Y_RTK
R2348 0 3.3K
R2346 3.3K
R2347 3.3K
W843

DVD LD CTL
Q2301
2SA1036K
R2306 6.8
R2318 6.8
R2232 220
TP2307

CD LD CTL
Q2302
2SA2048
R2333 220
R2340 220
R2341 6.8
W809
TP2308
JG019

B2301
MMZ1608R102CT
B2302
MMZ1608R102CT
B2305
MMZ1608R102CT
(D_GND)

C2340_1 10V 100 YK
C2341_1 10V 100 YK

R2322 27K
R2352 100 TIN_SW
R2361 10K
R2353 100 TOUT_SW
R2350 4.7K
R2342 4.7K
R2349 100 HOME
MOT_LD-
MOT_LD+
P.CON+3.3V_D
MOT_SLED-
MOT_SLED+
MOT_SPDL-
MOT_SPDL+

C2358 100P CH
C2359 100P CH
C2360 100P CH
C2357 100P CH

TP2305 TP2303 TP2304 TP2306

TRACK_PWM
FOCUS_PWM

R2313 4.7K
R2310 4.7K
R2320 4.7K
R2309 100 +-1%
R2319 33K
TP2320
R2308 10K
R2301 1K
TP2322
R2307 75K
R2305 2.7K
R2321 15K
TP2319
R2234 10K
R2324 1K
R2326 5.6K
TP2318
R2327 4.7K
R2334 10K
R2324 1K

R2336 330
R2339 1.2K
R2335 3.3K
TP2323
TP2324

R2325 6.8K
R2328 4.7K
R2365 0.1 B
R2302 100 +-1%
C2365 0.1 B

C2301 0.1 F
C2313 0.1 B
C2302 0.1 B
R2303 2.2
C2303 0.1 B
R2304 2.2
TP2313
TP2314
TP2315
C2306 0.1 F
C2314_1 10V 100 YK
C2310_1 10V 100 YK

R2357 1K
R2358 120
C2307 0.1 B
JG057
R2323 1.2
R2329 1.2
JG058

1SS355
D2303
1SS355
D2304
C2304 0.022 B
C2305 0.1 B

W861

CAUTION SINCE THESE PARTS MARKED BY ⚠ ARE CRITICAL FOR SAFETY,USE ONES DESCRIBED IN PARTS LIST ONLY 。

ATTENTION: LES PIECES REPAREES PAR UN ⚠ ETANT DANGEREUSES AN POINT DE VUE SECURITE N'UTILISER QUE CELLS DECRITES DANS LA NOMENCLATURE DES PIECES。

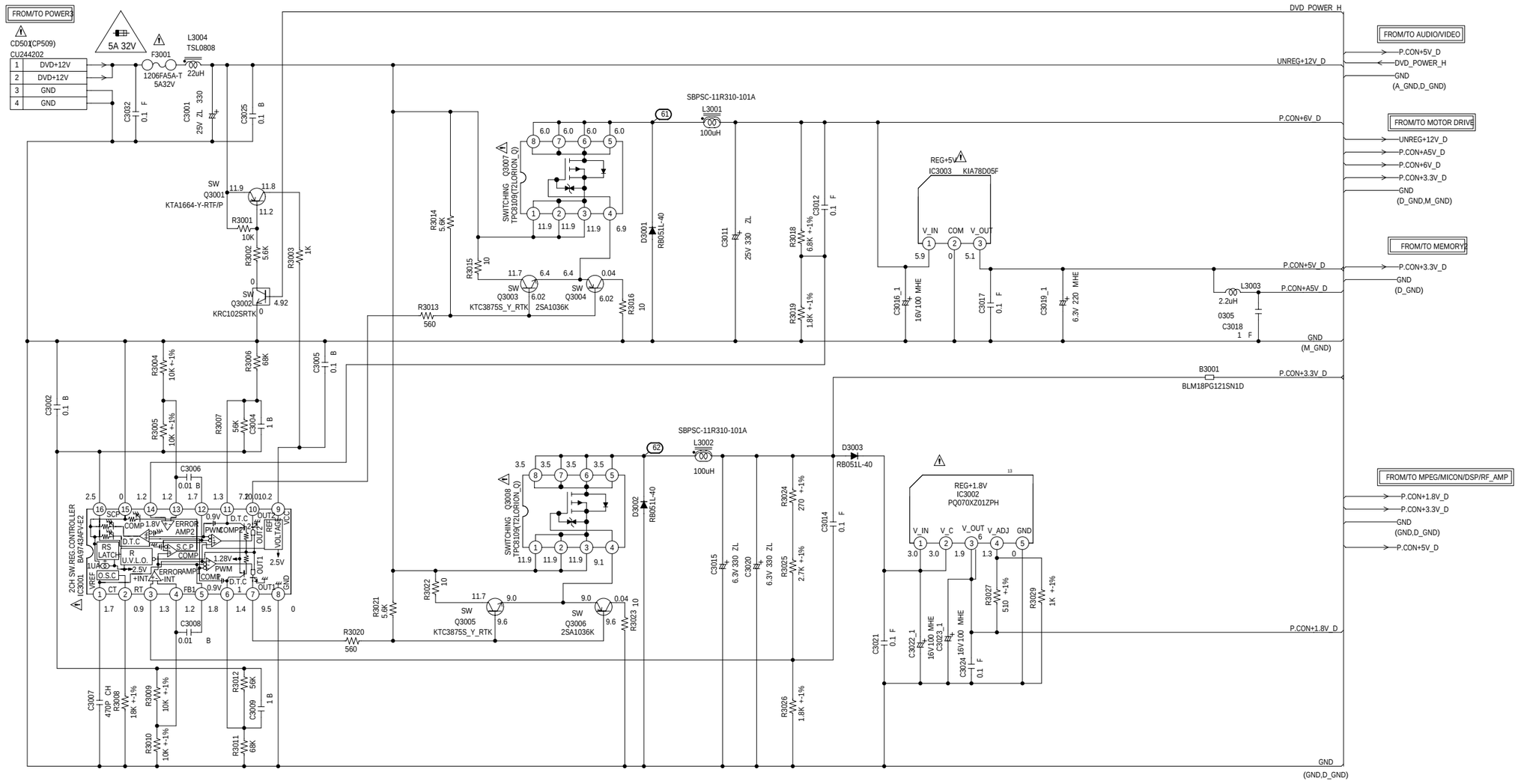
NOTE: THIS SCHEMATIC DIAGRAM IS THE LATEST AT THE TIME OF PRINTING AND SUBJECT TO CHANGE WITHOUT NOTICE 。

NOTE: THE DC VOLTAGE EACH PART WAS MEASURED WITH THE DIGITAL TESTER DURING PLAYBACK.

PCB130
DMF066

REGULATOR2 SCHEMATIC DIAGRAM

(DVD MT PCB)



5A 32V

CAUTION: FOR CONTINUED PROTECTION AGAINST FIRE HAZARD, REPLACE ONLY WITH THE SAME TYPE FUSE 5A 32V (F3001)

ATTENTION: POUR UNE PROTECTION CONTINUE LES RISQUES D'INCEIE N'UTILISER QUE DES FUSIBLE DE MEME TYPE 5A 32V (F3001)

CAUTION: F3001 IS MANUFACTURED BY COOPER INDUSTRIES INC., TYPE 1206FA-T.

CAUTION: SINCE THESE PARTS MARKED BY ⚠ ARE CRITICAL FOR SAFETY, USE ONES DESCRIBED IN PARTS LIST ONLY 。

ATTENTION: LES PIECES REPAREES PAR UN ⚠ ETANT DANGEREUSES AN POINT DE VUE SECURITE N'UTILISER QUE CELLS DECRITES DANS LA NOMENCLATURE DES PIECES。

NOTE: THIS SCHEMATIC DIAGRAM IS THE LATEST AT THE TIME OF PRINTING AND SUBJECT TO CHANGE WITHOUT NOTICE 。

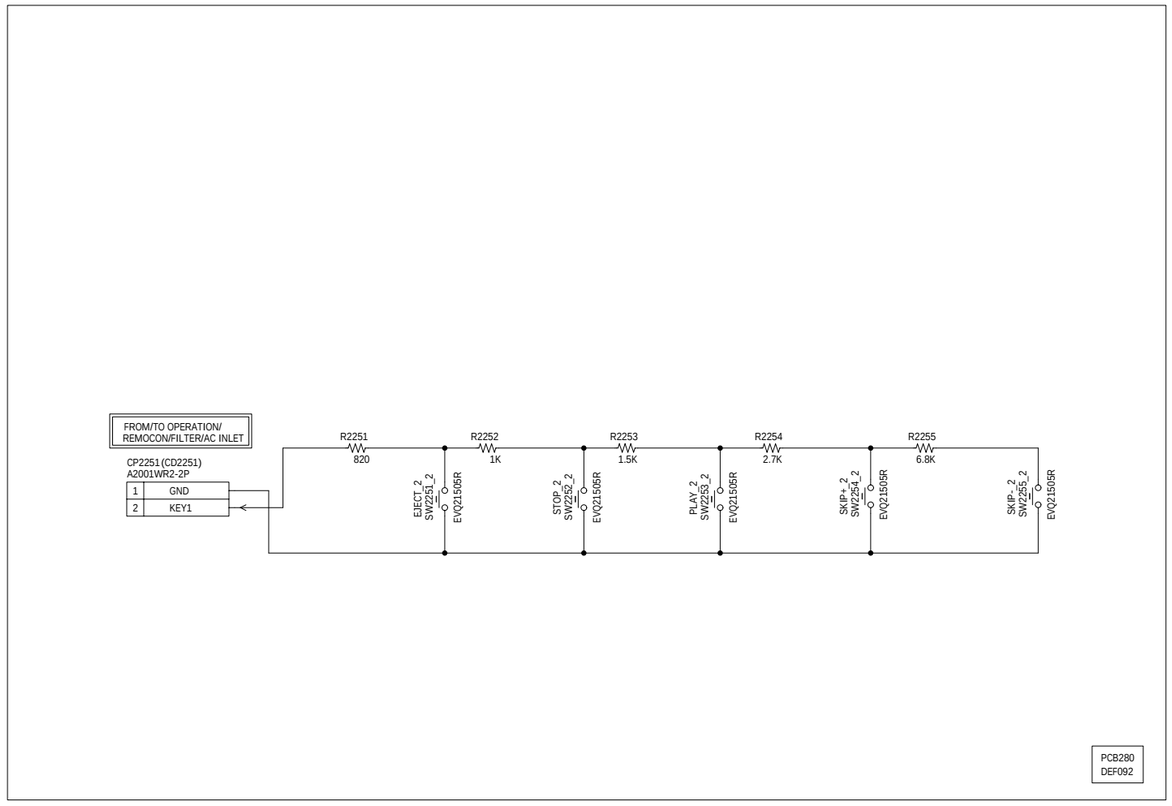
NOTE: THE DC VOLTAGE EACH PART WAS MEASURED WITH THE DIGITAL TESTER DURING PLAYBACK.

CAUTION: DIGITAL TRANSISTOR

PCB130
DMF066

OPERATION2 SCHEMATIC DIAGRAM

(OPERATION 2 PCB)

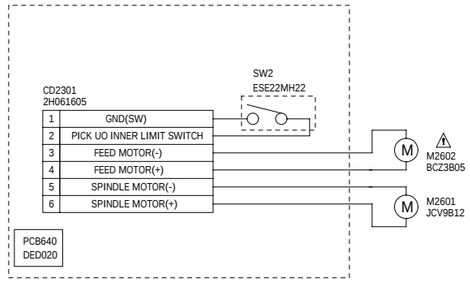


NOTE: THE DC VOLTAGE AT EACH PART WAS MEASURED WITH THE DIGITAL TESTER WHEN THE COLOR BROADCAST WAS RECEIVED IN GOOD CONDITION AND PICTURE IS NORMAL.

NOTE: THIS SCHEMATIC DIAGRAM IS THE LATEST AT THE TIME OF PRINTING AND SUBJECT TO CHANGE WITHOUT NOTICE。

SW SCHEMATIC DIAGRAM

(SW PCB)

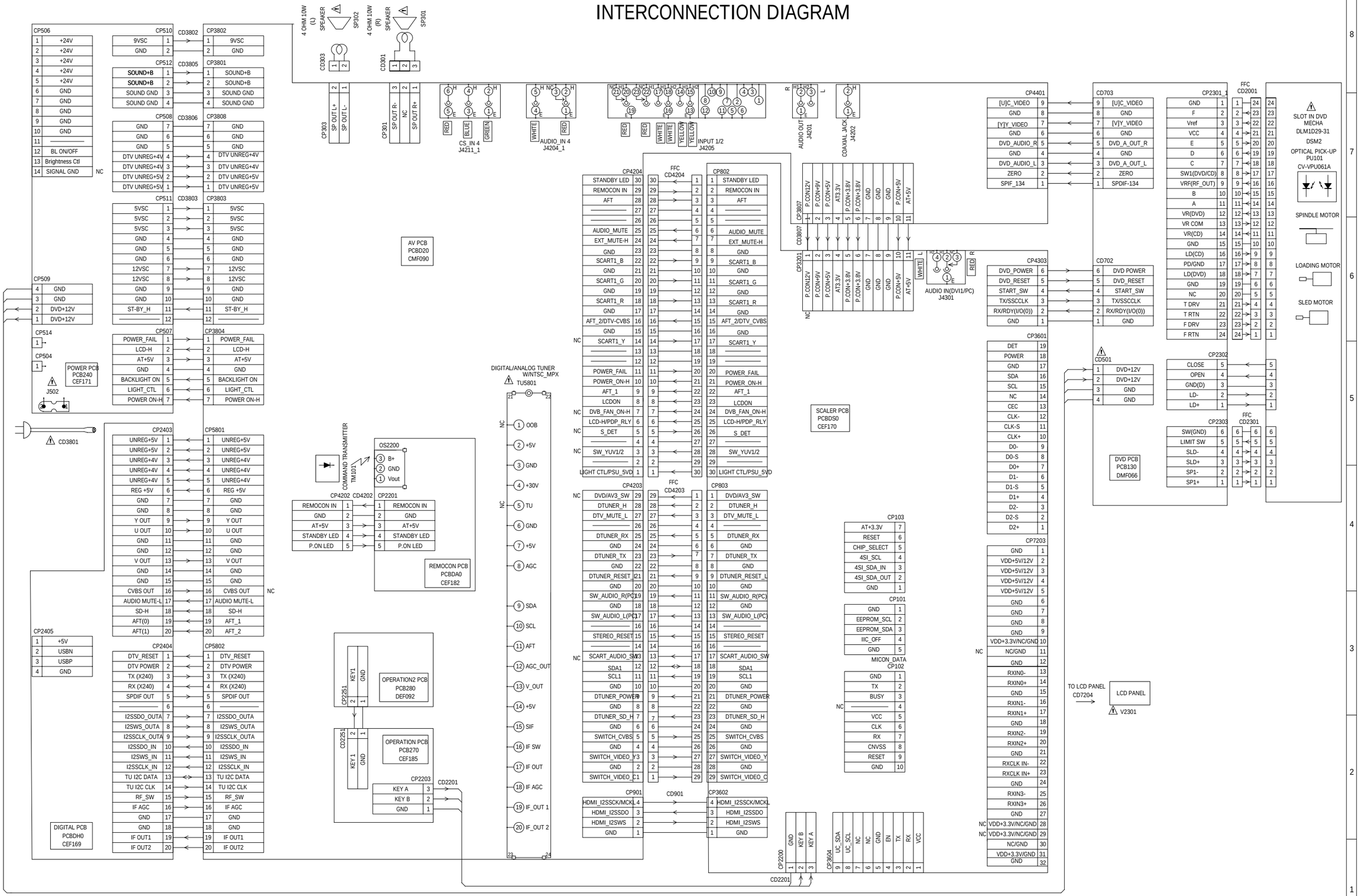


CAUTION SINCE THESE PARTS MARKED BY ⚠ ARE CRITICAL FOR SAFETY,USE ONES DESCRIBED IN PARTS LIST ONLY

ATTENTION: LES PIECES REPAREES PAR UN ⚠ ETANT DANGEREUSES AN POINT DE VUE SECURITE N'UTILISER QUE CELLS DECRITES DANS LA NOMENCLATURE DES PIECES

NOTE: THIS SCHEMATIC DIAGRAM IS THE LATEST AT THE TIME OF PRINTING AND SUBJECT TO CHANGE WITHOUT NOTICE。

INTERCONNECTION DIAGRAM


4 OHM 10W (L) SPEAKER SP302
4 OHM 10W (R) SPEAKER SP301
CD303
CD301
CP303 SP OUT L+ SP OUT L-
CP301 SP OUT R- NC SP OUT R+
CS_IN 4 J4211_1
AUDIO_IN 4 J4204_1
INPUT 1/2 J4205
AUDIO OUT J4201
COAXIAL JACK J4202
AV PCB PCBD20 CMF090
CP506 +24V +24V +24V +24V +24V GND GND GND GND BL ON/OFF Brightness Ctl SIGNAL GND
CP510 9VSC GND
CP512 SOUND+B SOUND+B SOUND GND SOUND GND
CP508 GND GND GND DTV UNREG+4V DTV UNREG+4V DTV UNREG+5V DTV UNREG+5V
CP511 5VSC 5VSC 5VSC GND GND GND 12VSC 12VSC GND GND ST-BY_H
CP507 POWER_FAIL LCD-H AT+5V GND BACKLIGHT ON LIGHT_CTL POWER ON-H
CD3802 CD3805 CD3806 CD3803
CP3802 9VSC GND
CP3801 SOUND+B SOUND+B SOUND GND SOUND GND
CP3808 GND GND GND DTV UNREG+4V DTV UNREG+4V DTV UNREG+5V DTV UNREG+5V
CP3803 5VSC 5VSC 5VSC GND GND GND 12VSC 12VSC GND GND ST-BY_H
CP3804 POWER_FAIL LCD-H AT+5V GND BACKLIGHT ON LIGHT_CTL POWER ON-H
CP509 GND DVD+12V DVD+12V
CP514
CP504
POWER PCB PCB240 CEF171
J502
CD3801
CP2403 UNREG+5V UNREG+5V UNREG+4V UNREG+4V UNREG+4V REG +5V GND GND Y OUT U OUT GND GND V OUT GND GND CVBS OUT AUDIO MUTE-L SD-H AFT(0) AFT(1)
CP5801 UNREG+5V UNREG+5V UNREG+4V UNREG+4V UNREG+4V REG +5V GND GND Y OUT U OUT GND GND V OUT GND GND CVBS OUT AUDIO MUTE-L SD-H AFT_1 AFT_2
NC
CP2405 +5V USBN USBP GND
CP2404 DTV_RESET DTV POWER TX (X240) RX (X240) SPDIF OUT I2SSDO_OUTA I2SWS_OUTA I2SSCLK_OUTA I2SSDO_IN I2SWS_IN I2SSCLK_IN TU I2C DATA TU I2C CLK RF_SW IF AGC GND GND IF OUT1 IF OUT2
CP5802 DTV_RESET DTV POWER TX (X240) RX (X240) SPDIF OUT I2SSDO_OUTA I2SWS_OUTA I2SSCLK_OUTA I2SSDO_IN I2SWS_IN I2SSCLK_IN TU I2C DATA TU I2C CLK RF_SW IF AGC GND GND IF OUT1 IF OUT2
DIGITAL PCB PCBDH0 CEF169
COMMAND TRANSMITTER TM101
OS2200 B+ GND Vout
CP4202 CD4202 CP2201
REMOCON IN GND AT+5V STANDBY LED P.ON LED
REMOCON PCB PCBDA0 CEF182
OPERATION2 PCB PCB280 DEF092
CP2251 KEY1 GND
OPERATION PCB PCB270 CEF185
CD2251 KEY 1 GND
CP2203 KEY A KEY B GND
CD2201
DIGITAL/ANALOG TUNER W/NTSC_MPX TU5801
OOB +5V GND +30V TU GND +5V AGC SDA SCL AFT AGC_OUT V_OUT +5V SIF IF SW IF OUT IF AGC IF_OUT 1 IF_OUT 2
CP4204 STANDBY LED REMOCON IN AFT AUDIO_MUTE EXT_MUTE-H GND SCART1_B GND SCART1_G GND SCART1_R GND AFT_2/DTV-CVBS GND SCART1_Y POWER_FAIL POWER_ON-H AFT_1 LCDON DVB_FAN_ON-H LCD-H/PDP_RLY S_DET SW_YUV1/2 LIGHT CTL/PSU_5VD
FFC CD4204
CP802 STANDBY LED REMOCON IN AFT AUDIO_MUTE EXT_MUTE-H GND SCART1_B GND SCART1_G GND SCART1_R GND AFT_2/DTV_CVBS GND SCART1_Y POWER_FAIL POWER_ON-H AFT_1 LCDON DVB_FAN_ON-H LCD-H/PDP_RLY S_DET SW_YUV1/2 LIGHT CTL/PSU_5VD
CP4203 DVD/AV3_SW DTUNER_H DTV_MUTE_L DTUNER_RX GND DTUNER_TX GND DTUNER_RESET_L GND SW_AUDIO_R(PC) GND SW_AUDIO_L(PC) STEREO_RESET SCART_AUDIO_SW SDA1 SCL1 GND DTUNER_POWER GND DTUNER_SD_H GND SWITCH_CVBS GND SWITCH_VIDEO_Y GND SWITCH_VIDEO_C
FFC CD4203
CP803 DVD/AV3_SW DTUNER_H DTV_MUTE_L DTUNER_RX GND DTUNER_TX GND DTUNER_RESET_L GND SW_AUDIO_R(PC) GND SW_AUDIO_L(PC) STEREO_RESET SCART_AUDIO_SW SDA1 SCL1 GND DTUNER_POWER GND DTUNER_SD_H GND SWITCH_CVBS GND SWITCH_VIDEO_Y GND SWITCH_VIDEO_C
CP901 HDMI_I2SSCK/MCKL HDMI_I2SSDO HDMI_I2SWS GND
CD901
CP3602 HDMI_I2SSCK/MCKL HDMI_I2SSDO HDMI_I2SWS GND
CP3807 P.CON12V P.CON+9V P.CON+5V AT3.3V P.CON+3.8V P.CON+3.8V GND GND GND P.CON+5V AT+5V
CD3807
CP3201 P.CON12V P.CON+9V P.CON+5V AT3.3V P.CON+3.8V P.CON+3.8V GND GND GND P.CON+5V AT+5V
NC
SCALER PCB PCBDS0 CEF170
AUDIO IN(DVI1/PC) J4301
CP4303 DVD_POWER DVD_RESET START_SW TX/SSCCLK RX/RDY(I/O(0)) GND
CP3601 DET POWER GND SDA SCL NC CEC CLK- CLK-S CLK+ D0- D0-S D0+ D1- D1-S D1+ D2- D2-S D2+
CP4401 [U]C_VIDEO GND [Y]Y_VIDEO GND DVD_AUDIO_R GND DVD_AUDIO_L ZERO SPIF_134
CD703 [U]C_VIDEO GND [Y]Y_VIDEO GND DVD_A_OUT_R GND DVD_A_OUT_L ZERO SPDIF-134
CD702 DVD POWER DVD_RESET START_SW TX/SSCCLK RX/RDY(I/O(0)) GND
CD501 DVD+12V DVD+12V GND GND
DVD PCB PCB130 DMF066
CP2301_1 GND F Vref VCC E D C SW1(DVD/CD) VRF(RF_OUT) B A VR(DVD) VR COM VR(CD) GND LD(CD) PD/GND LD(DVD) GND NC T DRV T RTN F DRV F RTN
FFC CD2001
CP2302 CLOSE OPEN GND(D) LD- LD+
CP2303 SW(GND) LIMIT SW SLD- SLD+ SP1- SP1+
FFC CD2301
SLOT IN DVD MECHA DLM1D29-31
DSM2
OPTICAL PICK-UP PU101
CV-VPU061A
SPINDLE MOTOR
LOADING MOTOR
SLED MOTOR
CP103 AT+3.3V RESET CHIP_SELECT 4SI_SCL 4SI_SDA_IN 4SI_SDA_OUT GND
CP101 GND EEPROM_SCL EEPROM_SDA IIC_OFF GND
MICON_DATA
CP102 GND TX BUSY NC VCC CLK RX CNVSS RESET GND
CP7203 GND VDD+5V/12V VDD+5V/12V VDD+5V/12V VDD+5V/12V GND GND GND GND VDD+3.3V/NC/GND NC/GND GND RXIN0- RXIN0+ GND RXIN1- RXIN1+ GND RXIN2- RXIN2+ GND RXCLK IN- RXCLK IN+ GND RXIN3- RXIN3+ GND VDD+3.3V/NC/GND VDD+3.3V/NC/GND NC/GND VDD+3.3V/GND GND
TO LCD PANEL CD7204
LCD PANEL V2301
CP2600 GND KEY B KEY A
CP3604 UC_SDA UC_SCL NC NC GND EN TX RX VCC

NOTE: THIS INTERCONNECTION DIAGRAM IS THE LATEST AT THE TIME OF PRINTING AND SUBJECT TO CHANGE WITHOUT NOTICE 。

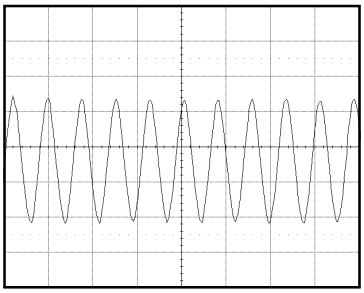
CAUTION SINCE THESE PARTS MARKED BY ⚠ ARE CRITICAL FOR SAFETY,USE ONES DESCRIBED IN PARTS LIST ONLY 。

ATTENTION :LES PIECES REPAREES PAR UN ⚠ ETANT DANGEREUSES AN POINT DE VUE SECURITE N'UTILISER QUE CELLS DECRITES DANS LA NOMENCLATURE DES PIECES。

WAVEFORMS

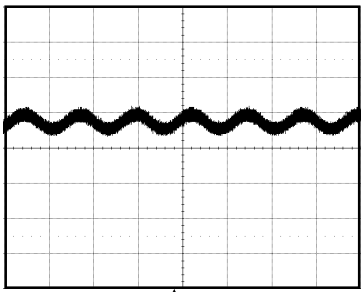
ADC

20ns
1.0V



①

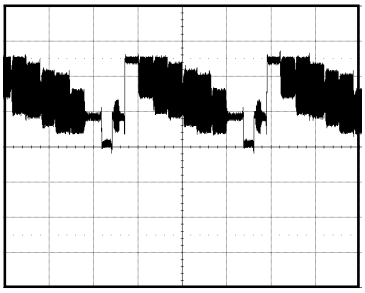
2.0ms
2.0V



⑥

TUNER

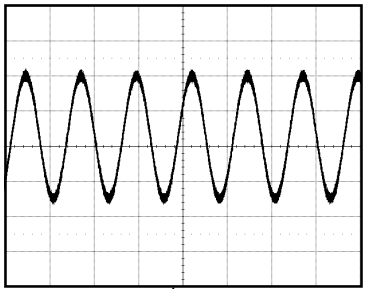
20µs
1.0V



⑪

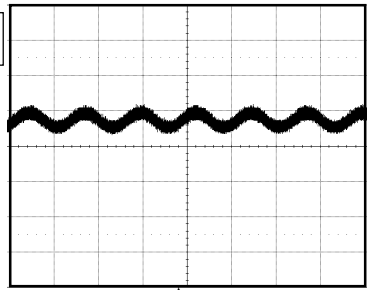
SOUND AMP/HEADPHON AMP

2.0ms
500mV



②

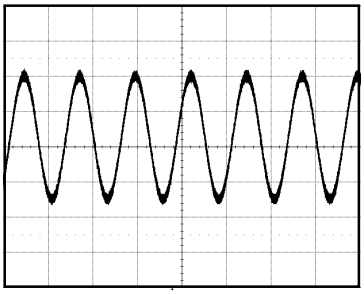
2.0ms
2.0V



⑦

STEREO

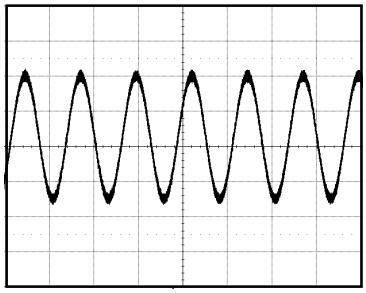
2.0ms
500mV



⑫

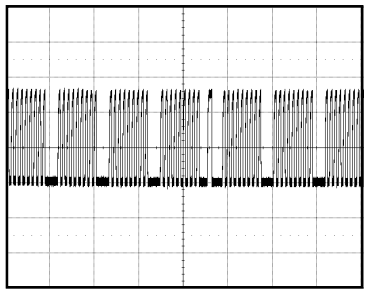
AV SWITCH2

2.0ms
500mV



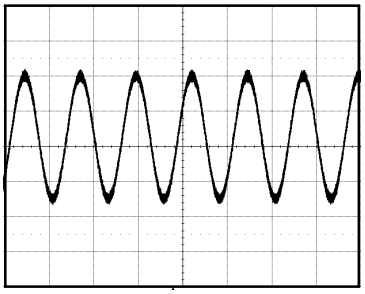
③

100µs
2.0V



⑧

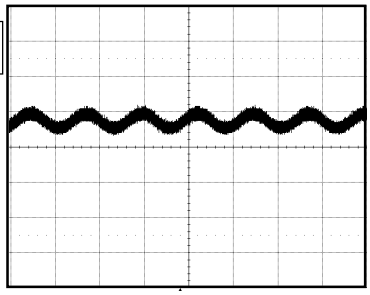
2.0ms
500mV



⑬

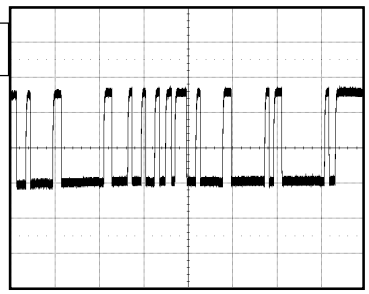
MICON

2.0ms
2.0V



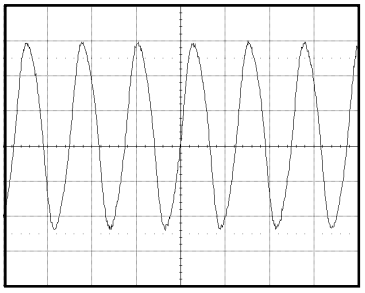
④

100µs
2.0V



⑨

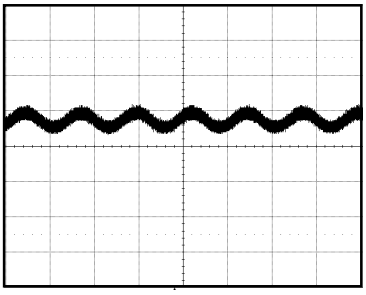
50ns
500mV



⑭

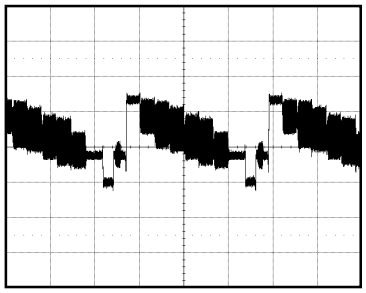
SCALER

2.0ms
2.0V



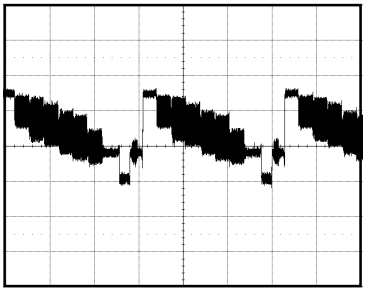
⑤

20µs
500mV



⑩

20µs
500mV



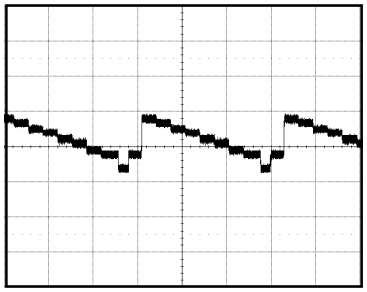
⑮

NOTE: The following waveforms were measured at the point of the corresponding balloon number in the schematic diagram.

WAVEFORMS

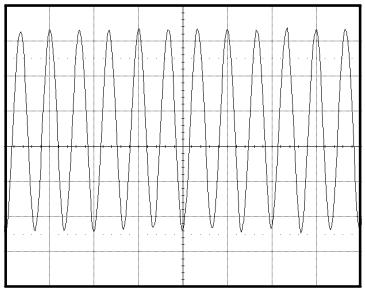
20µs
500mV

16



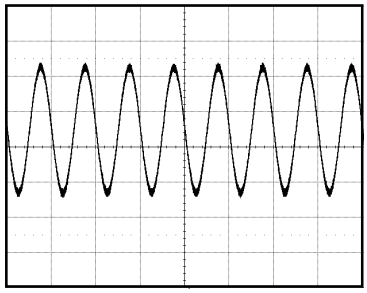
20µs
500mV

21



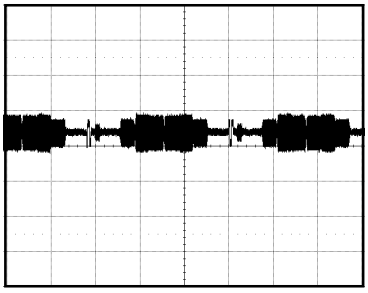
1.0ms
1.0V

26



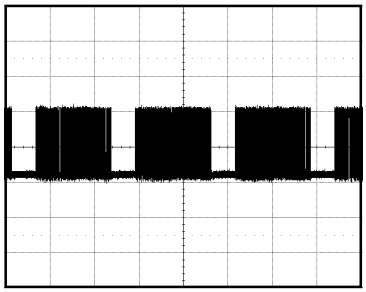
20µs
500mV

17



10µs
2.0V

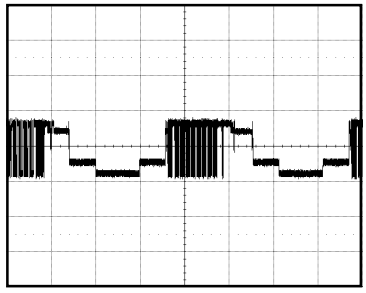
22



ADC

5µs
500mV

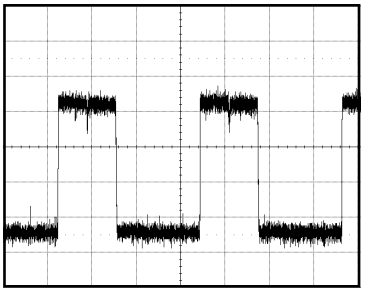
27



ADC

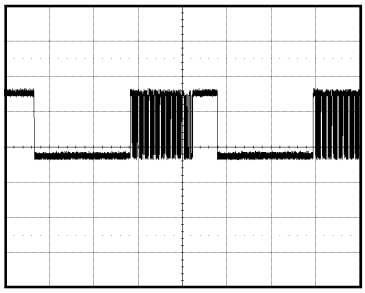
20µs
200mV

18



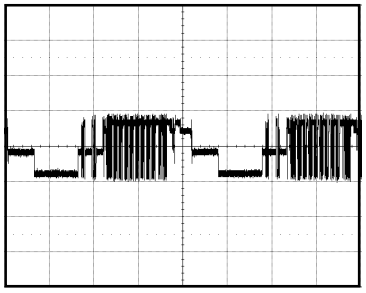
5µs
2.0V

23



5µs
500mV

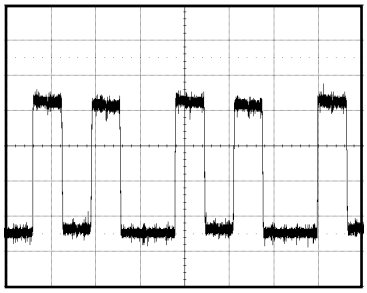
28



LVDS

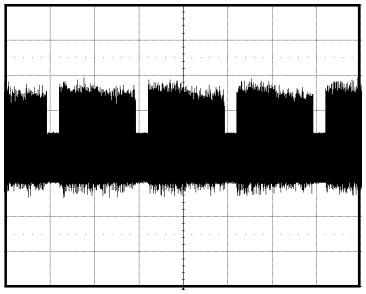
20µs
200mV

19



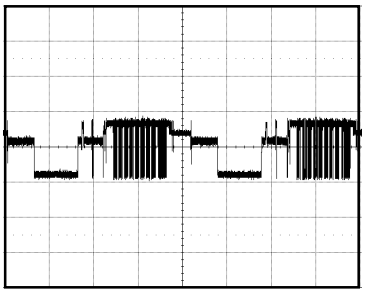
10ms
100mV

24



5µs
500mV

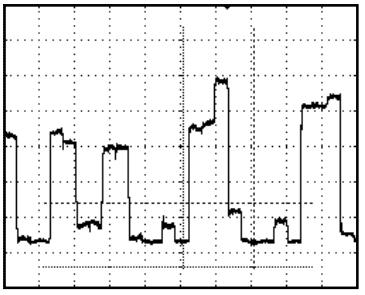
29



JACK

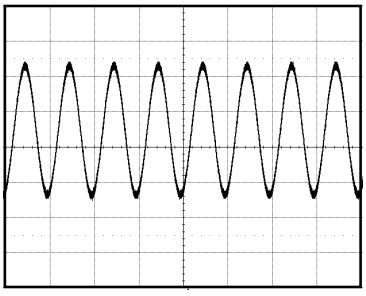
20µs
200mV

20



1.0ms
1.0V

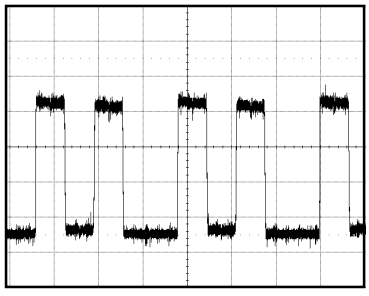
25



INTERFACE_HDMI IC

20µs
1.0V

30

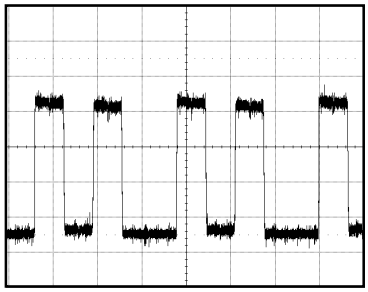


NOTE: The following waveforms were measured at the point of the corresponding balloon number in the schematic diagram.

WAVEFORMS

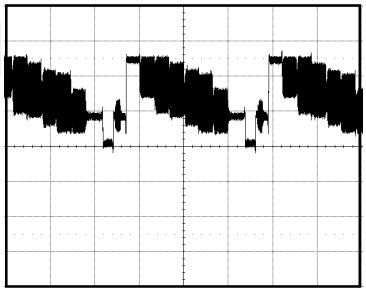
20µs
1.0V

(31)



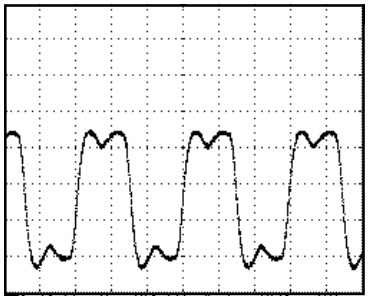
20µs
1.0V

(36)



20ns
1.0V

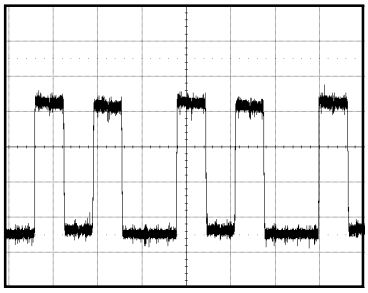
(53)



ASIC

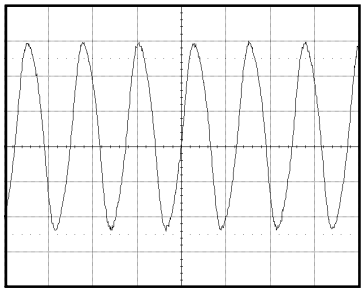
20µs
1.0V

(32)



10ns
50mV

(37)



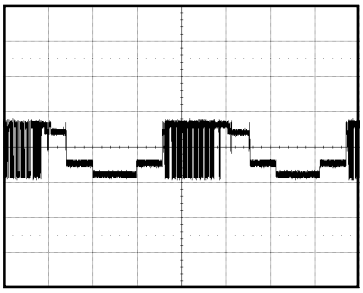
200ns
1.0V

(54)

AV OUT

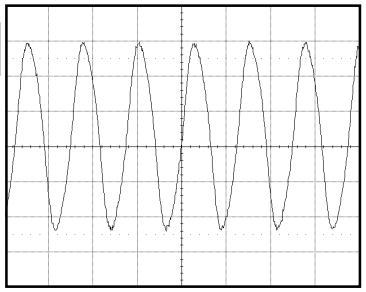
5µs
2.0V

(33)



20ns
50mV

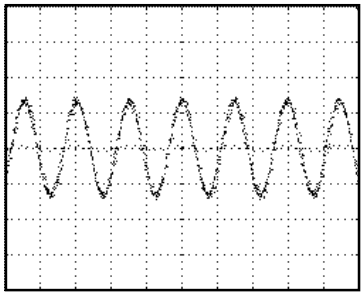
(38)



MEMORY

5ns
500mV

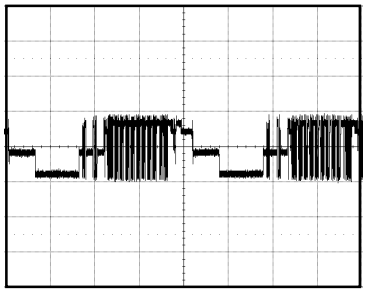
(55)



MPEG/MICON/DSP

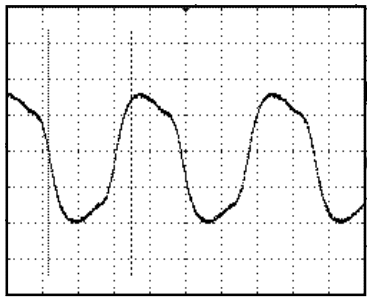
5µs
2.0V

(34)



10ns
100mV

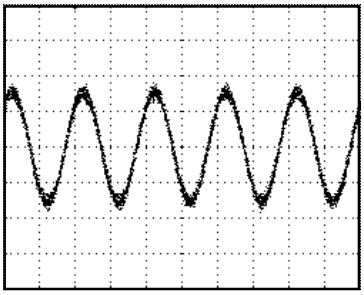
(51)



AUDIO/VIDEO

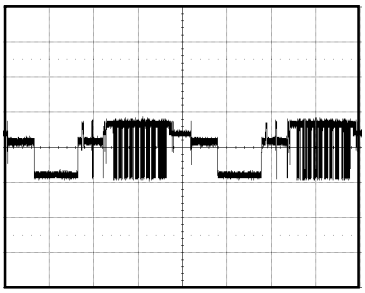
500µs
500mV

(56)



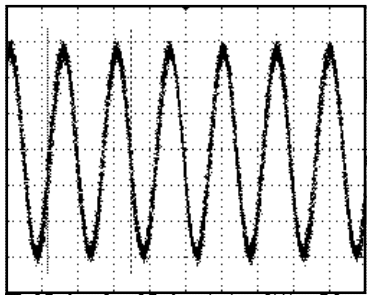
5µs
2.0V

(35)



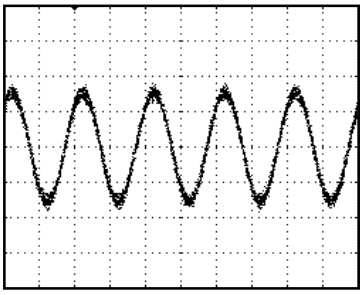
5ns
20mV

(52)



500µs
500mV

(57)

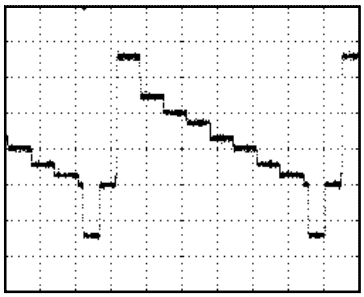


NOTE: The following waveforms were measured at the point of the corresponding balloon number in the schematic diagram.

WAVEFORMS

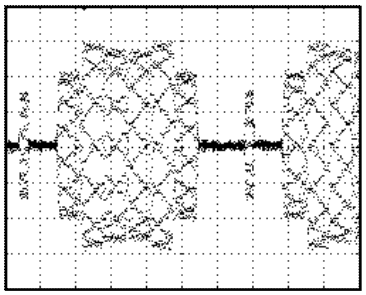
10µs
200mV

59



10µs
200mV

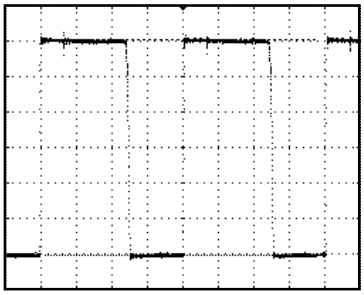
60



REGULATOR 2

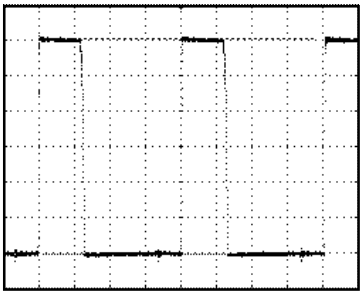
2µs
2.0V

61



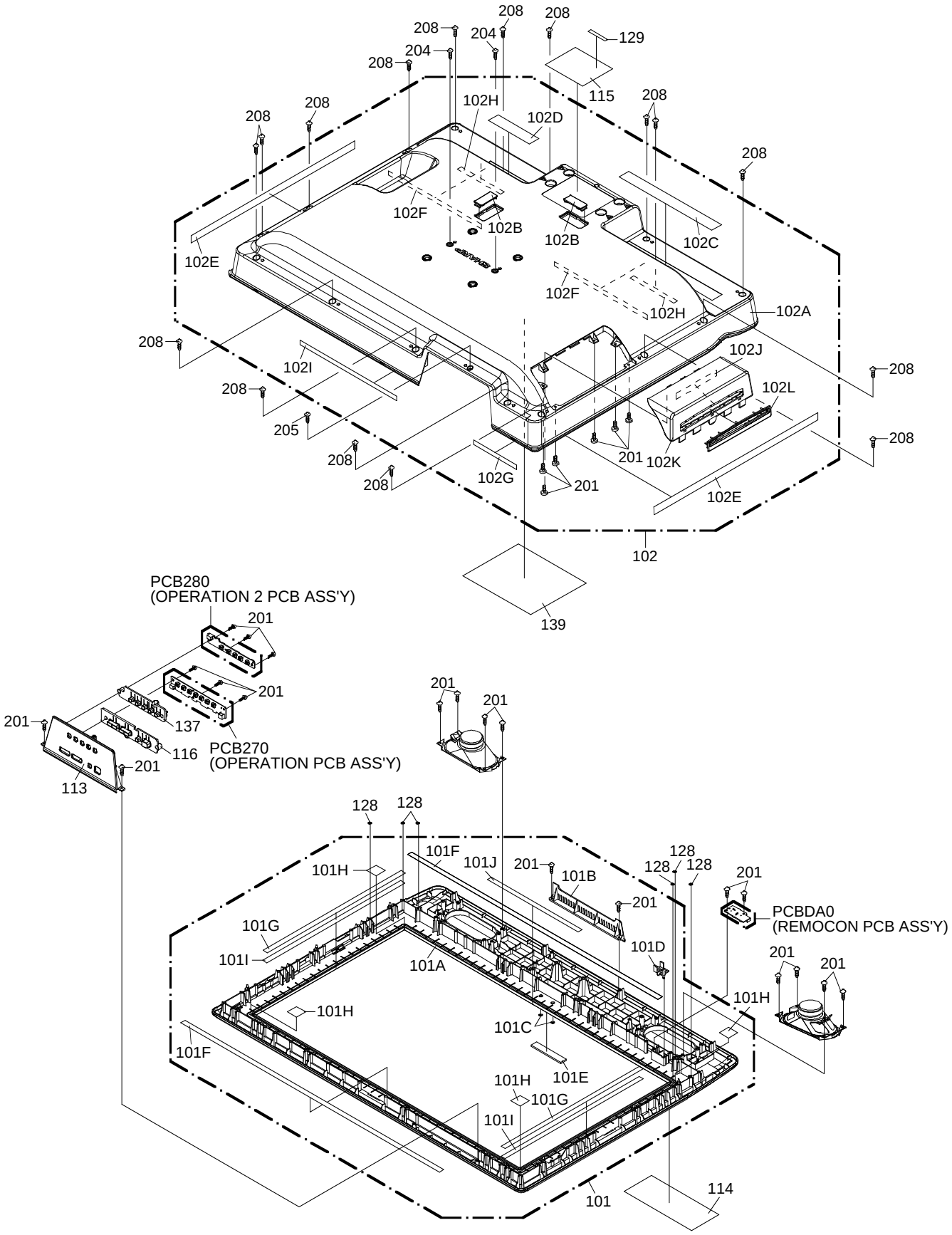
2µs
2.0V

62

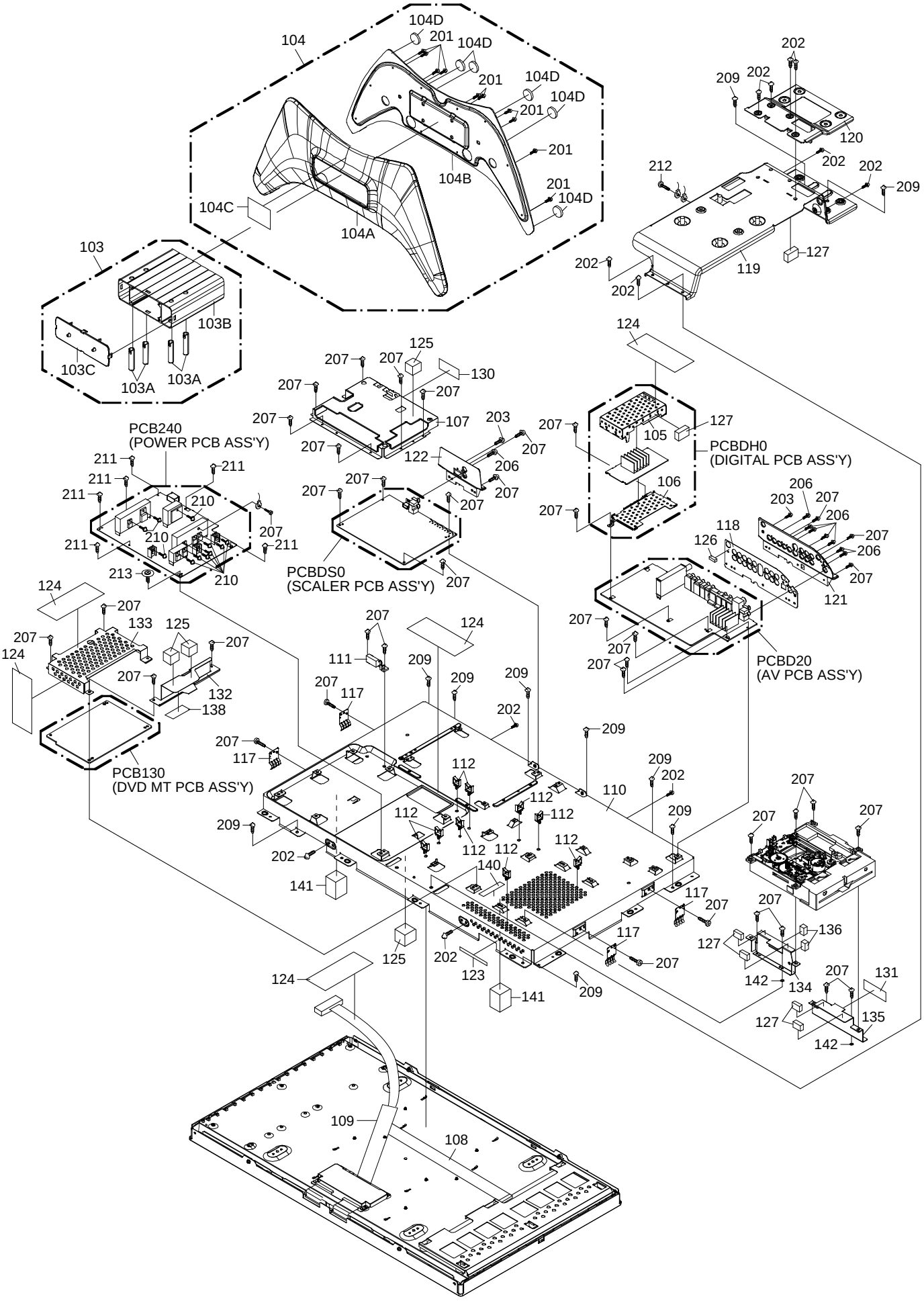


NOTE: The following waveforms were measured at the point of the corresponding balloon number in the schematic diagram.

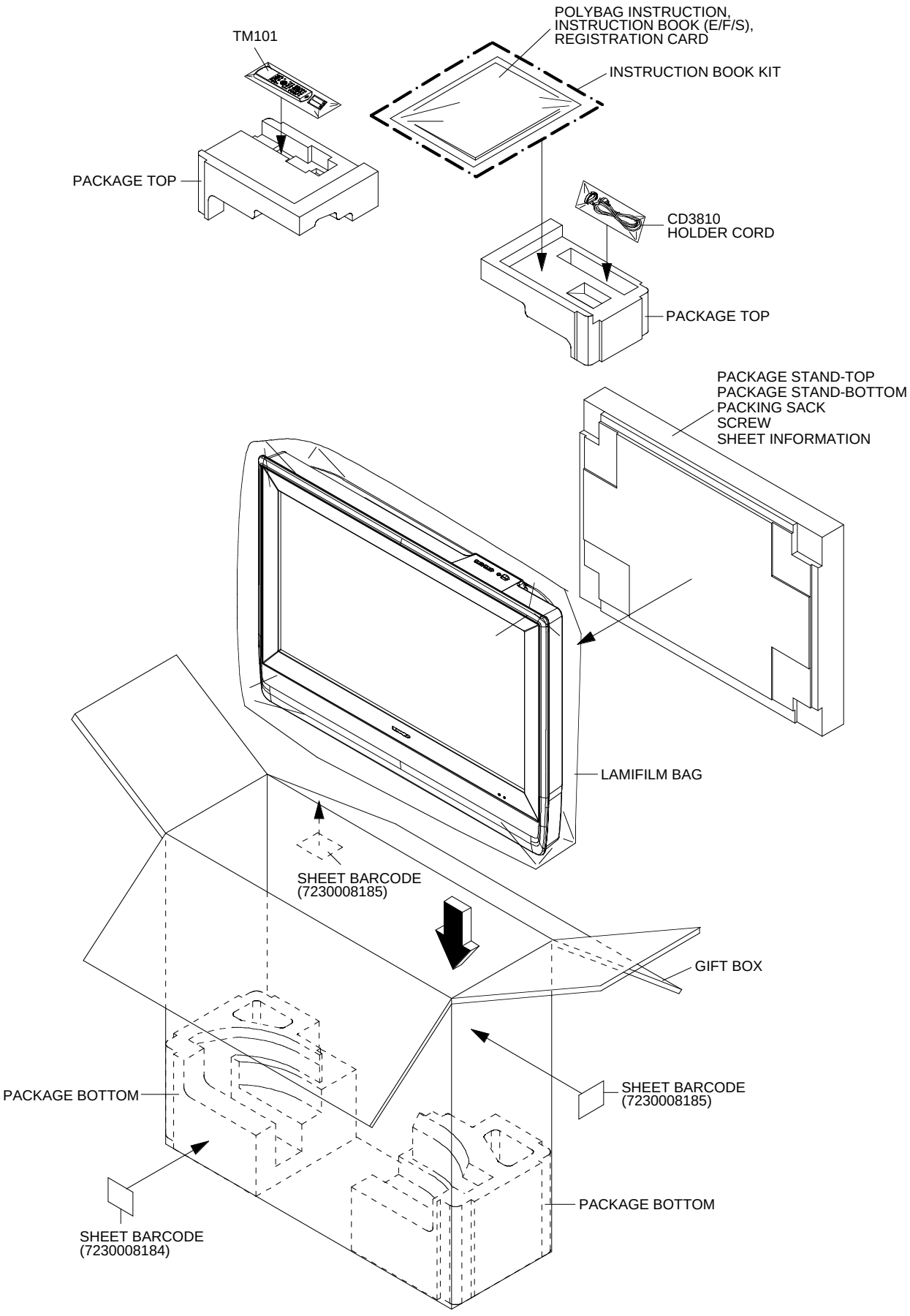
MECHANICAL EXPLODED VIEW



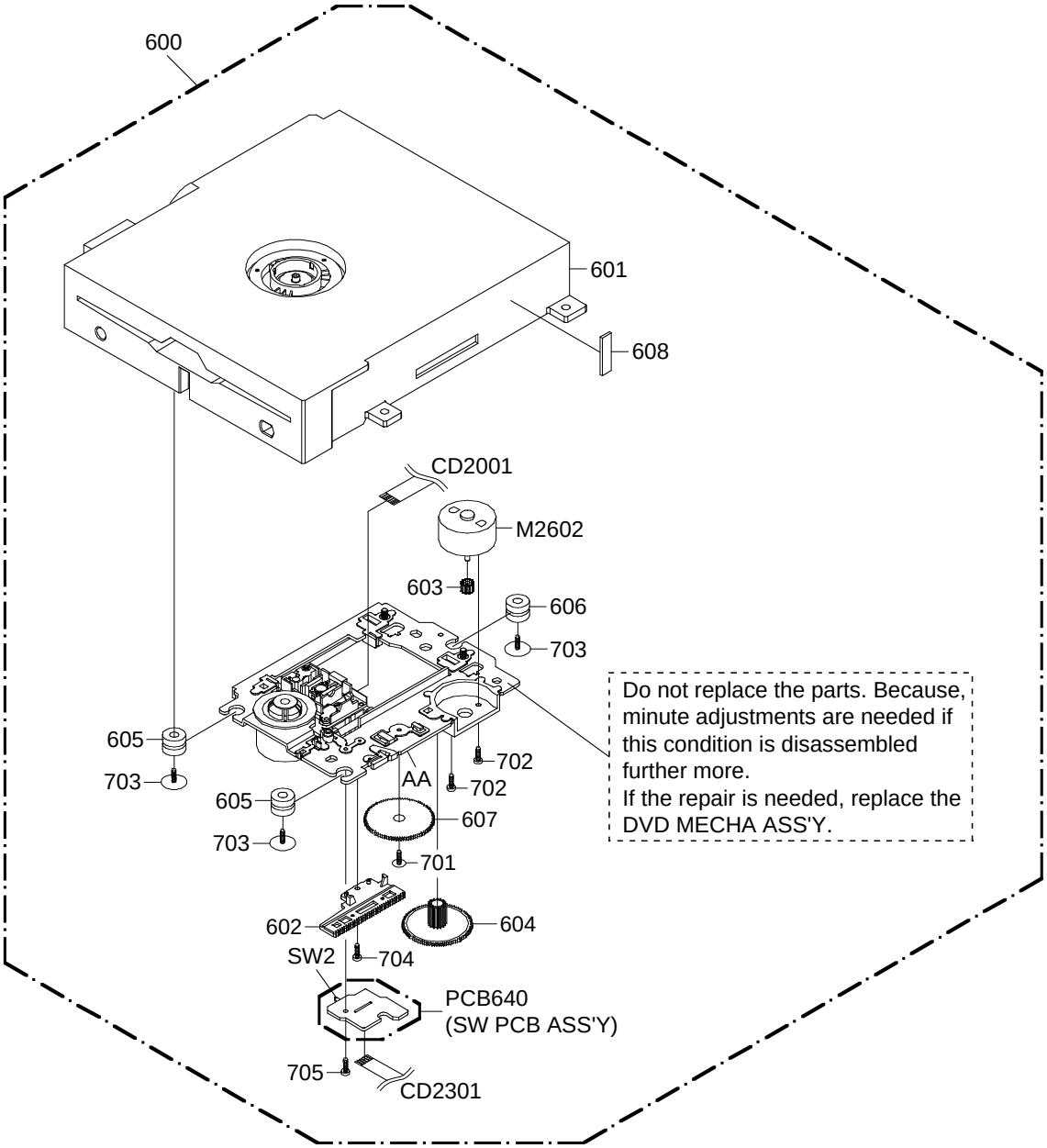
MECHANICAL EXPLODED VIEW



MECHANICAL EXPLODED VIEW
(PACKING DIAGRAM)



DVD DECK EXPLODED VIEW



CLASS	PART NO.	PART NAME	MARK
GREASE	Y315061000	G-555G	AA

NOTE: Applying positions AA for the grease are displayed for this section.
Check if the correct grease is applied for each position.

MECHANICAL REPLACEMENT PARTS LIST

REF. NO.	PART NO.	DESCRIPTION		REF. NO.	PART NO.	DESCRIPTION	
101	7A7010241A	FRONT CABI ASS'Y		201	8117540A6U	SCREW TAPPING(B0) TRUSS	4x16
101A	701WPJ1457	CABINET FRONT		202	8159130A0S	SCREW TAPPING(B) WASHER12 PAN	3x10
101B	702WPBA231	COVER HINGE		203	8110230A4S	SCREW TAP TITE(P) BIND	3x14
101C	713WPA0402	GLASS LED		204	8110230A4U	SCREW TAP TITE(P) BIND	3x14
101D	7235270026	BADGE BRAND		205	8110630A0U	SCREW TAP TITE(P) BRAZIER	3x10
101E	735WPB0342	BUTTON FRAME-TV		206	811063080U	SCREW TAP TITE(P) BRAZIER	3x8
101F	735WPB0343	BUTTON FRAME-DVD		207	8109230A0U	SCREW TAP TITE(B) BIND	3x10
101G	800WQ0A049	FELT SHEET		208	810923080S	SCREW TAP TITE(B) BIND	3x8
101H	800WQ00094	FELT SHEET		209	810923080U	SCREW TAP TITE(B) BIND	3x8
101I	83SPN1500W	PUSH NUT					
				210	8109I30A0U	SCREW TAP TITE(B) WH7	3x10
102	7A702A234A	BACK CABI ASS'Y		211	810723060U	SCREW TAP TITE(S) BIND	3x6
102A	702WPJA009	CABINET BACK		212	810A140A0U	SCREW WASHER(A)	M4x10
102B	704WPB0025	SLOT DVD		213	810A13050U	SCREW WASHER(A)	M3x5
102C	706WPBA002	COVER CONNECTOR		214	810213080U	SCREW PAN	M3x8
102D	774WPA0009	HOLDER CORD		215	810223060U	SCREW BIND	
102E	800WQ0A070	FELT SHEET					
102F	800WQ0A110	FELT SHEET		---	7230008196	SHEET BARCODE	
102G	800WQ00105	FELT SHEET		---	7290000175	SHEET INFORMATION	
				---	791WHA0130	LAMIFILM BAG	
103	7A7040019A	STAND ASS'Y		---	792WHA0684	PACKAGE TOP	
103A	704WPBA012	STAND		---	792WHA0685	PACKAGE BOTTOM	
103B	761WSB0043	ANGLE STAND		---	793WCD1779	GIFT BOX	
103C	800WFA0063	CUSHION LEG		---	A5X204E975	INSTRUCTION BOOK KIT	
				---	J3Y00417A	REGISTRATION CARD(SHARP)	
104	706JSA0015	HINGE ASS'Y		---	J5X20431A	INSTRUCTION BOOK(E/F/S)	
105	702WPBA226	COVER BACK		---	JA4ND200	POLYBAG INSTRUCTION(RED CAUTION)	
106	7220001228	SHEET SERIAL					
107	7225270031	SHEET RATING					
108	7230008190	POP LABEL					
109	7230008206	SHEET JACK-1					
110	7230008208	SHEET JACK-2					
111	7230008209	SHEET JACK-3					
112	7230008228	ENERGY STAR LABEL					
113	726000A073	SHEET CAUTION					
114	735WEA0004	SHEET,CU					
115	744WUA0022	SPRING EARTH					
116	752WSA0575	SHIELD SCALER					
117	752WSA0589	SHIELD,JACK-1					
118	752WSA0590	SHIELD,JACK-2					
119	752WSA0607	SHIELD MPEG					
120	752WSA0612	SHIELD FFC					
121	752WSA0616	SHIELD TRAVERSE					
122	753WEA0022	SHEET,CU					
123	761WPA0452	HOLDER PCB-TV					
124	761WPA0453	HOLDER PCB-DVD					
125	761WSA0264	ANGLE HINGE					
126	761WSA0394	ANGLE,HANDLE-DVD					
127	761WSA0396	COVER,LCD					
128	761WSA0401	ANGLE DECK-L					
129	761WSA0402	ANGLE DECK-R					
130	771WPBA015	PLATE JACK-1					
131	771WPBA017	PLATE JACK-3					
132	771WPBA018	PLATE JACK-2					
133	774WPA0005	HOLDER WIRE-2					
134	800WFA0081	CUSHION					
135	890MP2401A	TAPE	50x35				
136	890PS61900	PUSH SPACER					
137	8965TS1017	CUSHION 65TS10-10	17.5x20x14				
138	8965TS1060	CUSHION W10/H10/L60					
139	899EFBA002	WIRING-CLIP					
140	8995034000	CORD CLIP UL CO.					

DVD DECK REPLACEMENT PARTS LIST

REF. NO.	PART NO.	DESCRIPTION	
⚠ 600	A5X204E650	DVD MECHA ASS'Y	A5X204E650
601	92SBB0033A	LOADER SUB ASS'Y	DLM1D29-31
602	92AAA0017A	FEED RACK ASS'Y	
603	92P100088A	GEAR,MOTOR	
604	92P100117A	GEAR,MIDDLE	
605	92P200017A	INSULATOR, F	
606	92P200018A	INSULATOR, R	
607	92P100116A	GEAR,FEED	
608	800WFAA008	CUSHION C	
701	92P700007A	SCREW,GEAR FEED	
702	814011723U	SCREW,PAN	M1.7x2.3 P3
703	816112080U	SEMS.TAP TITE(P) PAN W10	2x8
704	813381750U	SCREW,T-TITE(B)CAMERA PAN	M1.7x5.0 P3
705	811022080U	SCREW,TAP TITE(P) BIND	2x8
CD2001	122J4O1603	CORD JUMPER	127000-2933
CD2301	122H062102	CORD JUMPER	2H062102
⚠ M2602	1515S98004	MOTOR	BCZ3B05
PCB640	A5X002C640	SW PCB ASS'Y	DED020A
SW2	0500101036	PUSH SWITCH	ESE22MH22

ELECTRICAL REPLACEMENT PARTS LIST

REF. NO.	PART NO.	DESCRIPTION	
		REMOCON PCB ASS'Y	
		*** PCB ***	
PCBDA0	A5X204EDA0	REMOCON PCB ASS'Y	CEF202A
		*** DIODES ***	
D2202	0021E9Q010	LED	LTL-1BEFJ-002A
		*** CONNECTORS ***	
CP2201	069S250629	CONNECTOR PCB SIDE	A2001WV2-5P
		*** OTHERS ***	
OS2201	077A033001	REMOTE RECEIVER	ROM-V338TAO
		SCALER PCB ASS'Y	
		*** PCB ***	
PCBDS0	A5X204EDS0	SCALER PCB ASS'Y	CEF170A
		*** DIODES ***	
D101	DE7RB5R62B	DIODE ZENER	UDZS5.6B TE-17
D105	DD7R20S300	DIODE SCHOTTKY BARRIER	RB520S-30-TE61
D106	DE7RB5R62B	DIODE ZENER	UDZS5.6B TE-17
D109	DD7R20S300	DIODE SCHOTTKY BARRIER	RB520S-30-TE61
D802	DE7RB5R62B	DIODE ZENER	UDZS5.6B TE-17
D803	DE7RB5R62B	DIODE ZENER	UDZS5.6B TE-17
D805	DE7RB5R62B	DIODE ZENER	UDZS5.6B TE-17
D807	DD7R0S3550	DIODE SILICON	1SS355 TE-17
D3206	D28R1QS040	DIODE	EC31QS04-TE12L
D3207	D28R1QS040	DIODE	EC31QS04-TE12L
D3209	D28R11FS20	DIODE	EC11FS2-TE12L
D3600	D28R1QS040	DIODE	EC31QS04-TE12L
D3601	DD7R60L400	DIODE SCHOTTKY	RB160L-40-TE25
D3602	DE7RB5R62B	DIODE ZENER	UDZS5.6B TE-17
D3603	DD7R60L400	DIODE SCHOTTKY	RB160L-40-TE25
D3606	D28R1QS040	DIODE	EC31QS04-TE12L
D3609	DE7RB3R32B	DIODE ZENER	UDZS3.3B TE-17
D3613	DE7RB3R32B	DIODE ZENER	UDZS3.3B TE-17
D4301	DE7RB5R62B	DIODE ZENER	UDZS5.6B TE-17
D4302	DE7RB5R62B	DIODE ZENER	UDZS5.6B TE-17
D4310	DD7R0S3550	DIODE SILICON	1SS355 TE-17
		*** ICS ***	
IC101	I56F07158A	IC	OEC7158A
IC102	I9UF032290	IC	PST3229NR
IC103	S5X204EE01	MEMORY DATA	AT24C256N-10SU-2.7
IC104	S5X204EE02	MEMORY DATA	AT24C256N-10SU-2.7
IC801	I56K07A720	IC	R8J66607A72FP
IC2101	IFSK0883C0	IC	MST9883C-LF-110
⚠ IC3201	I07F0C0WF0	IC	BA00BC0WFP-E2
IC3202	I07F078200	IC	BD7820FP-E2
IC3600	I07F078200	IC	BD7820FP-E2
IC3601	S5X204EE05	MEMORY DATA	BR24L02F-WE2
IC3602	I07F0C0WF0	IC	BA00BC0WFP-E2
IC3603	IG1F090110	IC	SII9011CLU
IC3604	I0QJ045800	IC	NJM4580M(TE1)
IC3605	IG4F020210	IC	CM2021-00TR
IC3607	I1FF043340	IC	CS4334-KSZR
IC3608	S5X204EE04	MEMORY DATA	BR24L32F-WE2
IC3611	ICMF089E50	IC	SST89E58RD2-40-C-TQJE
IC4301	I0UF015010	IC	MM1501XNRE

IC4302	I0UF015010	IC	MM1501XNRE	
IC4303	I0UF015010	IC	MM1501XNRE	
IC4304	I0UF015010	IC	MM1501XNRE	
IC7201	IF8F0385A0	IC	ICSV385AGLFT	
IC8103	I0UF015010	IC	MM1501XNRE	
IC8104	I0QF025840	IC	NJM2584AM(TE1)	
		*** TRANSISTORS ***		
Q101	TNAAC05002	COMPOUND TRANSISTOR	KRC103SRTK	
Q104	T2AA5132E0	FET	KTK5132E-RTK/P	
Q105	TPAAC05002	COMPOUND TRANSISTOR	KRA103SRTK	
Q106	T2AA5132E0	FET	KTK5132E-RTK/P	
Q2101	TAAA1504SY	TRANSISTOR SILICON	KTA1504S_Y_RTK	
⚠ Q3205	TAAA01664Y	TRANSISTOR SILICON	KTA1664-Y-RTF/P	
Q3206	TNAAB05003	COMPOUND TRANSISTOR	KRC102SRTK	
Q3209	TCAA3875SY	TRANSISTOR SILICON	KTC3875S_Y_RTK	
Q3210	TCAA3875SY	TRANSISTOR SILICON	KTC3875S_Y_RTK	
Q3600	T2AA5132E0	FET	KTK5132E-RTK/P	
Q3601	TNAAD05001	COMPOUND TRANSISTOR	KRC104SRTK	
Q3605	T2AA5132E0	FET	KTK5132E-RTK/P	
Q3606	T2AA5132E0	FET	KTK5132E-RTK/P	
Q3607	TNAAD05001	COMPOUND TRANSISTOR	KRC104SRTK	
Q3608	TPAAA05001	COMPOUND TRANSISTOR	KRA101SRTK	
Q3609	TNAAD05001	COMPOUND TRANSISTOR	KRC104SRTK	
Q3610	TCAA3875SY	TRANSISTOR SILICON	KTC3875S_Y_RTK	
Q3611	TCAA3875SY	TRANSISTOR SILICON	KTC3875S_Y_RTK	
Q3612	TPAAA05001	COMPOUND TRANSISTOR	KRA101SRTK	
Q3613	TNAAD05001	COMPOUND TRANSISTOR	KRC104SRTK	
Q4301	TCAA3875SY	TRANSISTOR SILICON	KTC3875S_Y_RTK	
Q4302	TCAA3875SY	TRANSISTOR SILICON	KTC3875S_Y_RTK	
Q4304	TCAA3875SY	TRANSISTOR SILICON	KTC3875S_Y_RTK	
Q4305	TCAA3875SY	TRANSISTOR SILICON	KTC3875S_Y_RTK	
Q8101	TAAA1504SY	TRANSISTOR SILICON	KTA1504S_Y_RTK	
Q8102	TCAA3875SY	TRANSISTOR SILICON	KTC3875S_Y_RTK	
Q8103	TCAA3875SY	TRANSISTOR SILICON	KTC3875S_Y_RTK	
Q8105	TAAA1504SY	TRANSISTOR SILICON	KTA1504S_Y_RTK	
Q8106	TAAA1504SY	TRANSISTOR SILICON	KTA1504S_Y_RTK	
		*** COILS ***		
B801	024AC5181J	CORE,BEADS	BLM18PG181SN1D	
B802	024AC5181J	CORE,BEADS	BLM18PG181SN1D	
B803	024HC56005	CORE,BEADS	FCM1608CF-600T06	
B804	024HC56005	CORE,BEADS	FCM1608CF-600T06	
B805	024AC5181J	CORE,BEADS	BLM18PG181SN1D	
B2101	024HC56005	CORE,BEADS	FCM1608CF-600T06	
B3201	024AC5181J	CORE,BEADS	BLM18PG181SN1D	
B3202	024AC5181J	CORE,BEADS	BLM18PG181SN1D	
B3203	024AC5181J	CORE,BEADS	BLM18PG181SN1D	
B3204	024AC5181J	CORE,BEADS	BLM18PG181SN1D	
B3206	024AC5181J	CORE,BEADS	BLM18PG181SN1D	
B3207	024AC5181J	CORE,BEADS	BLM18PG181SN1D	
B3208	024AC5181J	CORE,BEADS	BLM18PG181SN1D	
B3601	024HC51513	CORE,BEADS	FCM1608KF-151T06	
B3602	024HC51513	CORE,BEADS	FCM1608KF-151T06	
B3603	024HC51513	CORE,BEADS	FCM1608KF-151T06	
B3604	024HC51513	CORE,BEADS	FCM1608KF-151T06	
B3605	024HC51513	CORE,BEADS	FCM1608KF-151T06	
B3608	024HC56005	CORE,BEADS	FCM1608CF-600T06	
B3609	024HC56005	CORE,BEADS	FCM1608CF-600T06	
B3610	024HC56005	CORE,BEADS	FCM1608CF-600T06	
B3611	024HC51023	CORE,BEADS	FCM1608KF-102T02	
B3613	024HC51023	CORE,BEADS	FCM1608KF-102T02	
B3614	024HC51513	CORE,BEADS	FCM1608KF-151T06	
B3615	024HC51513	CORE,BEADS	FCM1608KF-151T06	
B4303	024HC56005	CORE,BEADS	FCM1608CF-600T06	or
	024AC5600E	CORE,BEADS	BLM18BB600SN1D	
B4304	024HC56005	CORE,BEADS	FCM1608CF-600T06	or
	024AC5600E	CORE,BEADS	BLM18BB600SN1D	
B4305	024HC56005	CORE,BEADS	FCM1608CF-600T06	or
	024AC5600E	CORE,BEADS	BLM18BB600SN1D	
B4307	0246C51024	CORE,BEADS	MMZ1608R102CT	

B4308	0246C51024	CORE,BEADS	MMZ1608R102CT
B7201	024HC56005	CORE,BEADS	FCM1608CF-600T06
L2101	0216S8220K	COIL	22 UH
L2102	0216S8220K	COIL	22 UH
L2103	0216S8470K	COIL	47 UH
L2106	0216S42R2J	COIL	2.2 UH
L2107	0216S8220K	COIL	22 UH
L4301	0216S8470K	COIL	47 UH
L4306	0216S8220K	COIL	22 UH
L4307	0216S8220K	COIL	22 UH
L7201	0216S8470K	COIL	47 UH
L7202	0216S8470K	COIL	47 UH
L7203	0216S8470K	COIL	47 UH
L8102	0216S8470K	COIL	47 UH
L8104	0216S8470K	COIL	47 UH
L8105	0216S8220K	COIL	22 UH
		*** JACKS ***	
J4301	060J431025	RCA JACK	MSD-242VA1-03_NI_FE_LF
J4302	060K431027	RCA JACK	AV6-57B03-01H
		*** CONNECTORS ***	
CP101	069S250629	CONNECTOR PCB SIDE	A2001WV2-5P
CP102	069S2A0629	CONNECTOR PCB SIDE	A2001WV2-10P
CP103	069S270629	CONNECTOR PCB SIDE	A2001WV2-7P
CP802	069EVU3030	CONNECTOR PCB SIDE	00_6232_030_006_800+
CP803	069EVT3030	CONNECTOR PCB SIDE	00_6232_029_006_800+
CP2200	069S230629	CONNECTOR PCB SIDE	A2001WV2-3P
CP3201	069S2B0629	CONNECTOR PCB SIDE	A2001WV2-11P
CP3601	069HYJ3010	CONNECTOR PCB SIDE	DC1R019JDA
CP3604	069S290629	CONNECTOR PCB SIDE	A2001WV2-9P
CP4302	0694S15017	CONNECTOR PCB SIDE	1-1734344-1
CP4303	069S260629	CONNECTOR PCB SIDE	A2001WV2-6P
CP7203	069HVWT04A	CONNECTOR PCB SIDE	FI-X30S-HF-NPB
		*** CRYSTAL & CERAMIC OSCILLATORS ***	
X101	100WT01611	CRYSTAL	HC-49/U-S
X801	100YT05401	CRYSTAL	FCX-03
X3601	100CT01101	CRYSTAL	HC-49/U-S
X3602	100DT02801	CRYSTAL	SMD-49
		*** NETWORKS ***	
NR801	110P4000M4	R,NETWORK	4D03WGJ0000T5E
NR802	110P4470M4	R,NETWORK	4D03WGJ0470T5E
NR803	110P4470M4	R,NETWORK	4D03WGJ0470T5E
NR804	110P4470M4	R,NETWORK	4D03WGJ0470T5E
NR805	110P4470M4	R,NETWORK	4D03WGJ0470T5E
NR806	110P4470M4	R,NETWORK	4D03WGJ0470T5E
NR807	110P4470M4	R,NETWORK	4D03WGJ0470T5E
NR808	110P4103M4	R,NETWORK	4D03WGJ0103T5E
NR809	110P4103M4	R,NETWORK	4D03WGJ0103T5E
NR2101	110P4101M4	R,NETWORK	4D03WGJ0101T5E
NR2102	110P4101M4	R,NETWORK	4D03WGJ0101T5E
NR2103	110P4101M4	R,NETWORK	4D03WGJ0101T5E
NR2104	110P4101M4	R,NETWORK	4D03WGJ0101T5E
NR2105	110P4101M4	R,NETWORK	4D03WGJ0101T5E
NR2106	110P4101M4	R,NETWORK	4D03WGJ0101T5E
NR3601	110P4330M4	R,NETWORK	4D03WGJ0330T5E
NR3602	110P4000M4	R,NETWORK	4D03WGJ0000T5E
NR3604	110P4000M4	R,NETWORK	4D03WGJ0000T5E
NR3605	110P4000M4	R,NETWORK	4D03WGJ0000T5E
NR3606	110P4000M4	R,NETWORK	4D03WGJ0000T5E
NR3607	110P4000M4	R,NETWORK	4D03WGJ0000T5E
NR3608	110P4000M4	R,NETWORK	4D03WGJ0000T5E
NR7201	110P4470M4	R,NETWORK	4D03WGJ0470T5E
NR7202	110P4470M4	R,NETWORK	4D03WGJ0470T5E

		*** OTHERS ***	
SH4301	126R000038	TERMINAL PIN	TP00370-21
SH4302	126R000038	TERMINAL PIN	TP00370-21
SH4303	126R000038	TERMINAL PIN	TP00370-21
		AV PCB ASS'Y	
		*** PCB ***	
PCBD20	A5X204ED20	AV PCB ASS'Y	CMF087A
		*** RESISTORS ***	
⚠ R338	R3X28B010J	R,METAL OXIDE	1 OHM 3W
		*** CAPACITORS ***	
C339	E61FF3102D	CE EEUFM1E102E	1000 UF 25V
C6403	E61FF2102D	CE EEUFM1C102B	1000 UF 16V
		*** DIODES ***	
D301	D1VT001330	DIODE,SILICON	1SS133T-77
D4209	D1VT001330	DIODE,SILICON	1SS133T-77
D6401	D1VT001330	DIODE,SILICON	1SS133T-77
D6402	D28R1QS040	DIODE	EC31QS04-TE12L
D6403	D4AT01H3E0	DIODE RECTIFIER	1H3-E
		*** ICS ***	
IC301	I01FF58910	IC	AN5891SA-E1V
IC302	I03SP20520	IC	LA42052-E
IC303	I0QF0580V0	IC	NJM4580V(TE1)
IC901	I01FF58320	IC	AN5832SA-E1V
IC4201	I01F05853B	IC	AN15853B-E1
IC4202	I0QJ045800	IC	NJM4580M(TE1)
IC4203	I0UF015010	IC	MM1501XNRE
IC4204	I0UF015010	IC	MM1501XNRE
IC6401	I1LF010150	IC	AL1015
IC6402	TJ7M50P030	FET	RSS050P03_TB
IC6403	I03D979950	IC	LA7995M-TLM
		*** TRANSISTORS ***	
Q301	TCAA3875SY	TRANSISTOR SILICON	KTC3875S_Y_RTK
Q302	TAAA1504SY	TRANSISTOR SILICON	KTA1504S_Y_RTK
Q303	TCAA3875SY	TRANSISTOR SILICON	KTC3875S_Y_RTK
Q304	TCAA3875SY	TRANSISTOR SILICON	KTC3875S_Y_RTK
Q305	TCAA3875SY	TRANSISTOR SILICON	KTC3875S_Y_RTK
Q306	TPAAA05001	COMPOUND TRANSISTOR	KRA101SRTK
Q709	TCAA3875SY	TRANSISTOR SILICON	KTC3875S_Y_RTK
Q4201	TCAA3875SY	TRANSISTOR SILICON	KTC3875S_Y_RTK
Q4202	TCAA3875SY	TRANSISTOR SILICON	KTC3875S_Y_RTK
Q4203	TCAA3875SY	TRANSISTOR SILICON	KTC3875S_Y_RTK
Q4204	TCAA3875SY	TRANSISTOR SILICON	KTC3875S_Y_RTK
Q4205	T2AA5132E0	FET	KTK5132E-RTK/P
Q4206	T2AA5132E0	FET	KTK5132E-RTK/P
Q4207	TNAAD05001	COMPOUND TRANSISTOR	KRC104SRTK
Q4208	TCAA3875SY	TRANSISTOR SILICON	KTC3875S_Y_RTK
Q4209	TPAAA05001	COMPOUND TRANSISTOR	KRA101SRTK
Q4210	TNAAC05002	COMPOUND TRANSISTOR	KRC103SRTK
Q4231	TPAAC05002	COMPOUND TRANSISTOR	KRA103SRTK
Q4233	TNAAB05003	COMPOUND TRANSISTOR	KRC102SRTK
Q6401	TNAAC05002	COMPOUND TRANSISTOR	KRC103SRTK
Q6402	TNAAB05003	COMPOUND TRANSISTOR	KRC102SRTK
		*** COILS ***	
B701	024HT03553	CORE,BEADS	W5RH3.5X5X1.0
B702	024HT03553	CORE,BEADS	W5RH3.5X5X1.0
B6402	024AC5181J	CORE,BEADS	BLM18PG181SN1D

B6403	024AC5181J	CORE,BEADS	BLM18PG181SN1D
B6404	024AC5181J	CORE,BEADS	BLM18PG181SN1D
L001	02167F150J	COIL	15 UH
L002	02167F101J	COIL	100 UH
L003	0216S8330K	COIL NLCV32T-330K-P	F 33 UH
L301	02167F101J	COIL	100 UH
L302	02167F150J	COIL	15 UH
L703	02167F101J	COIL	100 UH
L901	02167F101J	COIL	100 UH
L4201	02167F470J	COIL	47 UH
L4202	02167F470J	COIL	47 UH
L4203	02167F470J	COIL	47 UH
L4206	02167F470J	COIL	47 UH
L4207	02167F470J	COIL	47 UH
L6401	02167E220K	COIL TSL0808RA-220K1	R7 22 UH
L6402	021404150M	COIL SBPSC-11R310-1	50A 15 UH
		*** JACKS ***	
J301	060J131016	HEADPHONE JACK	MSJ-2000_AG
J701	060R401122	RCA JACK	RCA-117-01
J4401	063Y700014	JACK	DIN-409B
J4402	060K421056	RCA JACK	AV-5A-66H
J4403	060K421058	RCA JACK	AV-5A-68H
J4404	060K421057	RCA JACK	AV-5A-67H
J4405	060K421056	RCA JACK	AV-5A-66H
J4406	060K421058	RCA JACK	AV-5A-68H
J4407	060K421057	RCA JACK	AV-5A-67H
		*** CONNECTORS ***	
CP301	069S140419	CONNECTOR PCB SIDE	A2502WV2-4P
CP4202	069S250629	CONNECTOR PCB SIDE	A2001WV2-5P
CP4203	069EVT3030	CONNECTOR PCB SIDE	00_6232_029_006_800+
CP4204	069EVU3030	CONNECTOR PCB SIDE	00_6232_030_006_800+
CP4401	069S290629	CONNECTOR PCB SIDE	A2001WV2-9P
CP6401	069S1E0019	CONNECTOR PCB SIDE	A2501WV2-14P
CP6402	069S280629	CONNECTOR PCB SIDE	A2001WV2-8P
CP6403	069S2B0629	CONNECTOR PCB SIDE	A2001WV2-11P
		*** TUNER ***	
TU001	0162300048	RF UNIT	115-V-LA35ARH
		*** OTHERS ***	
SH4201	126R000038	TERMINAL PIN	TP00370-21
SH4202	126R000038	TERMINAL PIN	TP00370-21
SH4203	126R000038	TERMINAL PIN	TP00370-21
SH4204	126R000038	TERMINAL PIN	TP00370-21
SH4205	126R000038	TERMINAL PIN	TP00370-21
SH4206	126R000038	TERMINAL PIN	TP00370-21
		POWER PCB ASS'Y	
		*** PCB ***	
PCB240	A5X204E240	POWER PCB ASS'Y	CEF198A
		*** RESISTORS ***	
⚠ R3801	RC31X1155J	RC RCR60CT52A155J	1.5M OHM 1W
⚠ R3805	R3X181R22J	R,METAL OXIDE	0.22 OHM 1W
⚠ R3812	R65584101J	R,FUSE RNF25R101J	100 OHM 1/4W
⚠ R3813	R3K58A104J	R,METAL OXIDE	100K OHM 2W
⚠ R3815	R63884102J	R,FUSE RF25CL10A102	J 1K OHM 1/4W
⚠ R3818	R63881R22J	R,FUSE RF1CL15AR22J	0.22 OHM 1W
R3864	R002T4102J	RC	1K OHM 1/4W
		*** CAPACITORS ***	
⚠ C3801	P2122B224M	CMP	0.22 UF 275V ECQUL

⚠ C3803	P2122B104M	CMP	0.1 UF 275V ECQUL	
⚠ C3806	CD39E0ME3M	CC DE1E3KX152MB5BA0	0.0015UF 250V	
⚠ C3807	E61FT2681D	CE EEUFM1C681B	680 UF 16V	
⚠ C3810	P2122B224M	CMP	0.22 UF 275V ECQUL	
⚠ C3817	CD39B0ML2K	CC DE1B3KX331KB5B	330 PF 250V	
⚠ C3821	CD39B0MH2K	CC DE1B3KX221KB5B	220 PF 250V	
⚠ C3827	E71LFC591D	CE EETEE2D591JJ	590 UF 200V	
C3829	C03L0R713K	CC	0.001 UF 2KV R	or
	C0PLRR713K	CC CK45-R3DD102KNRF	0.001 UF 2KV R	
C3836	P411F4393J	CMPP ECWF4393JBB	0.039 UF 400V ECWF	
⚠ C3839	CD39B0MH2K	CC DE1B3KX221KB5B	220 PF 250V	
C3841	C03L0R7H2K	CC	220 PF 2KV R	or
	C0PLRR7H2K	CC CK45-R3DD221KNRF	220 PF 2KV R	
⚠ C3842	E61FF4122D	CE EEUFM1V122LE	1200 UF 35V	
⚠ C3843	E61FF4122D	CE EEUFM1V122LE	1200 UF 35V	
C3847	E5EZU5220M	CE 50 MHE 22 MT1	22 UF 50V	
C3849	E61FF4122D	CE EEUFM1V122LE	1200 UF 35V	
⚠ C3853	E61FF3102D	CE EEUFM1E102E	1000 UF 25V	
⚠ C3857	E5EZU2101M	CE 16 MHE 100 MT1	100 UF 16V	
⚠ C3862	E5EZU2101M	CE 16 MHE 100 MT1	100 UF 16V	

*** DIODES ***

⚠ D3801	D6CE24110A	DIODE VARISTA	ENE241D-10A-Q6	
⚠ D3803	D6E027110A	DIODE VARISTA	ENE271D-10A	
D3804	D28R1QS040	DIODE	EC31QS04-TE12L	
⚠ D3806	DOU033020M	DIODE VARISTA	DSS-302M-S00B	
D3809	D1VT001330	DIODE,SILICON	1SS133T-77	
D3811	D4AT01H3E0	DIODE RECTIFIER	1H3-E	
⚠ D3812	D2B0BV6080	DIODE,BRIDGE	RBV-608	
D3813	D1VT001330	DIODE,SILICON	1SS133T-77	
D3814	D9WU06R22B	DIODE ZENER	MTZJ6.2B-EIC	or
	D97U06R21B	DIODE,ZENER	MTZJ6.2B T-77	
D3815	D2BXARS010	DIODE SILICON	SARS01-V1	
D3816	D1VT001330	DIODE,SILICON	1SS133T-77	
D3817	D4AT01H3E0	DIODE RECTIFIER	1H3-E	
D3818	D4AT01H3E0	DIODE RECTIFIER	1H3-E	
⚠ D3819	D2BAMX22S0	DIODE SCHOTTKY	FMX-22S	
⚠ D3820	D2BAMX22S0	DIODE SCHOTTKY	FMX-22S	
D3823	D1VT001330	DIODE,SILICON	1SS133T-77	
⚠ D3824	D2CA2C15R0	DIODE SCHOTTKY BARRI	ER YG862C15R	
D3825	D4AT01H3E0	DIODE RECTIFIER	1H3-E	
D3826	D9WU02002B	DIODE ZENER	MTZJ20B-EIC	or
	D97U02001B	DIODE,ZENER	MTZJ20B T-77	
D3827	D9WU03R32B	DIODE ZENER	MTZJ3.3B-EIC	or
	D97U03R31B	DIODE,ZENER	MTZJ3.3B T-77	
D3828	D9WU05R12B	DIODE ZENER	MTZJ5.1B-EIC	or
	D97U05R11B	DIODE,ZENER	MTZJ5.1B T-77	
D3829	D9WU03R92B	DIODE ZENER	MTZJ3.9B-EIC	or
	D97U03R91B	DIODE,ZENER	MTZJ3.9B T-77	
D3831	D1VT001330	DIODE,SILICON	1SS133T-77	
D3832	D9WU03R32B	DIODE ZENER	MTZJ3.3B-EIC	or
	D97U03R31B	DIODE,ZENER	MTZJ3.3B T-77	
D3833	D9WU05R12B	DIODE ZENER	MTZJ5.1B-EIC	
D3834	D9WU01102B	DIODE ZENER	MTZJ11B-EIC	or
	D97U01101B	DIODE,ZENER	MTZJ11B T-77	

*** ICS ***

⚠ IC3801	I0BT0X6730	IC	STR-X6737
⚠ IC3802	I03T057740	IC	LA5774-E
IC3803	I0GA9120R0	IC	PQ120RDA1SZH
⚠ IC3805	I1KJ9A431A	IC	KIA431A-AT
⚠ IC3806	I0GA9090R0	IC	PQ090RDA1SZH
⚠ IC3807	I0GA9050R0	IC	PQ050RDA1SZH
⚠ IC3808	000220002W	PHOTO COUPLER	PS2561AL1-1-V(W)

*** TRANSISTORS ***

Q3801	TCAA3875SY	TRANSISTOR SILICON	KTC3875S_Y_RTK
Q3804	TAAA1504SY	TRANSISTOR SILICON	KTA1504S_Y_RTK
Q3805	TNYJB05001	COMPOUND TRANSISTOR	DTC114EKAT146
Q3808	TNAAB05003	COMPOUND TRANSISTOR	KRC102SRTK

	Q3809	TCAT032034	TRANSISTOR, SILICON	KTC3203_Y-AT
			*** COILS ***	
	B3802	024HT03564	CORE,BEADS	W4BRH3.5X6X1.0
	B3804	024AC5181J	CORE,BEADS	BLM18PG181SN1D
	L3802	02186I6R8L	COIL 02186I6R8L	6.8 UH
	L3803	02167E220K	COIL TSL0808RA-220K1	R7 22 UH
⚠	L3804	029X000122	COIL,LINE FILTER	SS28V-R22110-CH
	L3805	021W0G330M	COIL 7313N-330M	33 UH
⚠	L3807	029X000122	COIL,LINE FILTER	SS28V-R22110-CH
	TR3801	02A6B2E0A1	CORE,FERRITE	HF70T22*10*14
			*** TRANSFORMERS ***	
⚠	T3801	0481400814	TRANSFORMER,SWITCHING	81400814
			*** CONNECTORS ***	
	CP3802	069W01001A	CONNECTOR PCB SIDE	003P-2100
	CP3805	069W01001A	CONNECTOR PCB SIDE	003P-2100
	CP3807	069S2E0629	CONNECTOR PCB SIDE	A2001WV2-14P
	CP3808	069S240629	CONNECTOR PCB SIDE	A2001WV2-4P
	CP3810	069S1E0019	CONNECTOR PCB SIDE	A2501WV2-14P
	CP3811	069S280629	CONNECTOR PCB SIDE	A2001WV2-8P
			*** FUSES ***	
⚠	F3801	081PC05005	FUSE	51MS050L
	FH3801	06710T0009	HOLDER,FUSE	EYF-52BCY
	FH3803	06710T0009	HOLDER,FUSE	EYF-52BCY
			*** AC CORD ***	
⚠	CD3801	1209414909	CORD AC BUSH	9414909
			*** THERMISTOR ***	
⚠	TH3801	DSR0LDNB00	THERMISTOR	NTPAA2R2LDNB0
			*** OTHERS ***	
	EL2401	124116281A	EYE LET	XRY16X28BD
	EL2402	124120301A	EYE LET	XRY20X30BD
	SH3801	126R000036	TERMINAL PIN	TP00385-21
	SH3802	126R000036	TERMINAL PIN	TP00385-21
	SH3803	126R000036	TERMINAL PIN	TP00385-21
	SH3804	126R000036	TERMINAL PIN	TP00385-21
			OPERATION PCB ASS'Y	
			*** PCB ***	
	PCB270	A5X204E270	OPERATION PCB ASS'Y	CEF201A
			*** SWITCHES ***	
	SW2201	0504101T34	SWITCH,TACT	EVQ21505R
	SW2202	0504101T34	SWITCH,TACT	EVQ21505R
	SW2203	0504101T34	SWITCH,TACT	EVQ21505R
	SW2204	0504101T34	SWITCH,TACT	EVQ21505R
	SW2206	0504101T34	SWITCH,TACT	EVQ21505R
	SW2208	0504101T34	SWITCH,TACT	EVQ21505R
	SW2209	0504101T34	SWITCH,TACT	EVQ21505R
			*** CONNECTORS ***	
	CD2200	06CU233002	CORD CONNECTOR	CU233002
	CD2202	06CU220702	CORD CONNECTOR	CU220702

OPERATION 2 PCB ASS'Y

*** PCB ***

PCB280	A5X204E280	OPERATION 2 PCB ASS'Y	DEF092A	

*** SWITCHES ***

SW2251	0504101T34	SWITCH,TACT	EVQ21505R	
SW2252	0504101T34	SWITCH,TACT	EVQ21505R	
SW2253	0504101T34	SWITCH,TACT	EVQ21505R	
SW2254	0504101T34	SWITCH,TACT	EVQ21505R	
SW2255	0504101T34	SWITCH,TACT	EVQ21505R	

*** CONNECTORS ***

CP2251	069S220639	CONNECTOR PCB SIDE	A2001WR2-2P	

DVD MT PCB ASS'Y

*** PCB ***

PCB130	A5X204E130	DVD MT PCB ASS'Y	DMF066A	

*** DIODES ***

D2303	DD7R0S3550	DIODE SILICON	1SS355 TE-17	
D2304	DD7R0S3550	DIODE SILICON	1SS355 TE-17	
D3001	DD7RB051L0	DIODE SCHOTTKY	RB051L-40_TE25	
D3002	DD7RB051L0	DIODE SCHOTTKY	RB051L-40_TE25	
D3003	DD7RB051L0	DIODE SCHOTTKY	RB051L-40_TE25	
D4002	DD7R0S3550	DIODE SILICON	1SS355 TE-17	
D4003	DD7R0S3550	DIODE SILICON	1SS355 TE-17	
D4005	DD7R0S3550	DIODE SILICON	1SS355 TE-17	
D4008	DD7R0S3550	DIODE SILICON	1SS355 TE-17	
D8509	DD7R0S3550	DIODE SILICON	1SS355 TE-17	
D8510	DD7R0S3550	DIODE SILICON	1SS355 TE-17	

*** ICS ***

⚠ IC2301	I03FV65650	IC	LA6565VR-TLM-E	
⚠ IC3001	I07F097430	IC	BA9743AFV-E2	
⚠ IC3002	I0GF91ZPH0	IC	PQ070XZ01ZPH	
⚠ IC3003	I1KF98D050	IC	KIA78D05F	
IC4001	ICQK068621	IC	ZR36862PQCG-B	
IC4007	S5X204EF01	MEMORY DATA	SST39VF1601-70-4C-EKE	
IC4009	IF9J0161A7	IC	M12L16161A-7TG	
IC8502	I17F017530	IC	PCM1753DBQR	

*** TRANSISTORS ***

Q2301	TAAA1505SY	TRANSISTOR SILICON	KTA1505S-Y-RTK/P	or
	T67J1036K0	TRANSISTOR SILICON	2SA1036KT146	
Q2302	TAAA1544T0	TRANSISTOR SILICON	KTA1544T-RTK/P	or
	T67J048TL0	TRANSISTOR SILICON	2SA2048TL	
Q2303	TCAA3875SY	TRANSISTOR SILICON	KTC3875S_Y_RTK	
Q2304	TCAA3875SY	TRANSISTOR SILICON	KTC3875S_Y_RTK	
Q2305	TCAA3875SY	TRANSISTOR SILICON	KTC3875S_Y_RTK	
Q3001	TAAA01664Y	TRANSISTOR SILICON	KTA1664-Y-RTF/P	or
	T77J011320	TRANSISTOR SILICON	2SB1132T100(Q,R)	
Q3002	TNAAB05003	COMPOUND TRANSISTOR	KRC102SRTK	
Q3003	TCAA3875SY	TRANSISTOR SILICON	KTC3875S_Y_RTK	
Q3004	TAAA1505SY	TRANSISTOR SILICON	KTA1505S-Y-RTK/P	or
	T67J1036K0	TRANSISTOR SILICON	2SA1036KT146	
Q3005	TCAA3875SY	TRANSISTOR SILICON	KTC3875S_Y_RTK	
Q3006	TAAA1505SY	TRANSISTOR SILICON	KTA1505S-Y-RTK/P	or
	T67J1036K0	TRANSISTOR SILICON	2SA1036KT146	
⚠ Q3007	TJ5M081090	FET	TPC8109(T2LORION_Q)	
⚠ Q3008	TJ5M081090	FET	TPC8109(T2LORION_Q)	

*** COILS ***

B2301	0246C51024	CORE,BEADS	MMZ1608R102CT

B2302	0246C51024	CORE,BEADS		MMZ1608R102CT
B2304	0246C51024	CORE,BEADS		MMZ1608R102CT
B2305	0246C51024	CORE,BEADS		MMZ1608R102CT
B3001	024BC5121J	CORE,BEADS		BLM18PG121SN1D
B4001	0246C51024	CORE,BEADS		MMZ1608R102CT
B4002	0246C51024	CORE,BEADS		MMZ1608R102CT
B4003	0246C51024	CORE,BEADS		MMZ1608R102CT
B4004	0246C51024	CORE,BEADS		MMZ1608R102CT
B4005	0246C51024	CORE,BEADS		MMZ1608R102CT
B4006	0246C51024	CORE,BEADS		MMZ1608R102CT
B4007	0246C51024	CORE,BEADS		MMZ1608R102CT
B4008	0246C51024	CORE,BEADS		MMZ1608R102CT
B4009	0246C51024	CORE,BEADS		MMZ1608R102CT
B4010	0246C51024	CORE,BEADS		MMZ1608R102CT
B4011	0246C51024	CORE,BEADS		MMZ1608R102CT
B4012	0246C51024	CORE,BEADS		MMZ1608R102CT
B4013	0246C51024	CORE,BEADS		MMZ1608R102CT
B4014	0246C51024	CORE,BEADS		MMZ1608R102CT
B4015	0246C51024	CORE,BEADS		MMZ1608R102CT
B4016	0246C51024	CORE,BEADS		MMZ1608R102CT
B4018	0246C51024	CORE,BEADS		MMZ1608R102CT
B8503	0246C51024	CORE,BEADS		MMZ1608R102CT
L3001	021404101L	COIL SBPSC-11R310-10		1A 100 UH
L3002	021404101L	COIL SBPSC-11R310-10		1A 100 UH
L3003	02167F2R2J	COIL		2.2 UH
L3004	02167E220K	COIL TSL0808RA-220K1		R7 22 UH
L8502	02167F1R0K	COIL		1 UH
L8503	02167F1R0K	COIL		1 UH
		*** CONNECTORS ***		
⚠ CD501	06CH241602	CORD CONNECTOR	CH241602	CH241602
CD702	06CU261503	CORD CONNECTOR	CU261503	CU261503
CD703	06CU291703	CORD CONNECTOR	CU291703	CU291703
CP2301	069KYOT159	CONNECTOR PCB SIDE	LD07T2-24ND-03	LD07T2-24ND-03
CP2302	069EV53030	CONNECTOR PCB SIDE	00_6232_005_006_800+	00_6232_005_006_800+
CP2303	069EV63030	CONNECTOR PCB SIDE	00_6232_006_006_800+	00_6232_006_006_800+
		*** CRYSTAL & CERAMIC OSCILLATORS ***		
X4001	100GT02720	CRYSTAL	B27000C005	B27000C005
		*** FUSES ***		
⚠ F3001	083LA05007	FUSE	1206FA5A-T	1206FA5A-T
		*** OTHERS ***		
SH8501	126R000038	TERMINAL PIN	TP00370-21	TP00370-21
		AND OTHERS		
		*** COILS ***		
TR3803	02AHB9A972	CORE,FERRITE		W5T29X7.5X19
TR3804	02AHB9A972	CORE,FERRITE		W5T29X7.5X19
TR3805	02AHB9A972	CORE,FERRITE		W5T29X7.5X19
TR3806	02A6B2E0A1	CORE,FERRITE		HF70T22*10*14
		*** CONNECTORS ***		
CD1004	06CU149009	CORD CONNECTOR	CU149009	CU149009
CD2201	06CU251003	CORD CONNECTOR	CU251003	CU251003
CD3807	06CH2E3802	CORD CONNECTOR	CH2E3802	CH2E3802
CD3810	06CU1E2401	CORD CONNECTOR	CU1E2401	CU1E2401
CD4203	122H0T0801	CORD JUMPER	2H0T0801	2H0T0801
CD4204	122H0U0802	CORD JUMPER	2H0U0802	2H0U0802
CD6402	06CH281501	CORD CONNECTOR	CH281501	CH281501
CD6403	06CU2B3901	CORD CONNECTOR	CU2B3901	CU2B3901
CD7204	06CHRU3201	CORD CONNECTOR	CHRU3201	CHRU3201

*** OTHERS ***

BT001	141R003018	BATTERY,MANGAN	GR6M	GR6M	or
	141L003010	BATTERY,MANGAN		R6P(AR)XICI	
BT002	141R003018	BATTERY,MANGAN	GR6M	GR6M	or
	141L003010	BATTERY,MANGAN		R6P(AR)XICI	
CUS911	800WFAA007	CUSHION B			
SP301	070N546012	SPEAKER	YDP4010-2	YDP4010-2	
SP302	070N546012	SPEAKER	YDP4010-2	YDP4010-2	
TM101	076B0MR020	TRANSMITTER	RRMCGA497WJSA	RRMCGA497WJSA	
V2301	09E4120004	LCD	LK200T3LZ10Y	LK200T3LZ10Y	

RESISTOR

RC..... CARBON RESISTOR

CAPACITORS

CC..... CERAMIC CAPACITOR
CE..... ALUMI ELECTROLYTIC CAPACITOR
CP..... POLYESTER CAPACITOR
CPP..... POLYPROPYLENE CAPACITOR
CPL..... PLASTIC CAPACITOR
CMP..... METAL POLYESTER CAPACITOR
CMPL..... METAL PLASTIC CAPACITOR
CMPP..... METAL POLYPROPYLENE CAPACITOR

SHARP

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